The ELECTRICAL REVIEW

TRADE NAMES SUPPLEMENT

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THE "ELECTRICAL REVIEW" TRADE NAMES SUPPLEMENT.

Name and Description.	Manufactured by or Obtainable from
ABBOTT BRAND Empire cloths and tapes in silk and cambric, pressphan, leatheroid, &c.	Abbott, Anderson & Abbott, Ltd., 17, Fore St., E.C.2.
A.B.C. Electric washers	Electrical Components, Ltd., 88-90, Gt. Charles St., Birmingham.
ACCIDENT PROOF Kettles	Premier Electric Heaters, Ltd., Keeley St. and St. Andrew's Rd., Birmingham.
ACE Insulating material	American Hard Rubber Co. (Britain), Ltd., 13a, Fore St., E.C.2.
A.C.E.C. Cables, electrical machinery, transformers	A.C.E.C., 56, Victoria St., London, S.W.1.
ACID SUPPLIES Accumulator acid, acid for all purposes	Herd & Co., Ltd., D2, Exchange Building, Liverpool.
ACME Automatic time switches, Goliath and Edison screw lamp holders, lanterns for street lighting	The "Acme" Lighting & Engineering Co., Waverley Rd., St. Albans, Herts.
ACME Motor starting switches	Acme Electrical Mfg. Co., Tariff Rd., N.17.
AD Primary cells	Le Carbone, Coventry House, South Place, E.C.2.
ADANAC Switch with fuses	Berry's Electric (1928), Ltd., 85-86, Newman St., Oxford St., W.1.
ADAPTABLE Earthing clip	Hann & Ingle, 13, Albert Place, Bridge St., Manchester.
ADJUSTABLE Adaptor (two pin to B.C.)	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
ADNIL Press-button switches of "ebolite"	S. G. Leach & Co., Ltd., 26-30, Artillery Lane, E.1.
ADVANCE Flush and semi-recessed plug connectors	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
AEROFLEX Rewirable cartridge fuses with high-rupturing capacity	Parmiter, Hope & Sugden, Ltd., Fluvent Electrical Works, Vernon St., Longsight, Manchester.
AJAX-NORTHRUP Electric furnace, high frequency, for steel, nickel alloys, platinum, &c.	Electric Furnace Co., Ltd., 17, Victoria St., S.W.1.
AJAX-WYATT Electric furnace, induction type, for brass and nickel-silver melting	Electric Furnace Co., Ltd., 17, Victoria St., S.W.1.
AKK-EMMAR Rectifiers for battery charging, kinema projectors, X-ray apparatus and all other non-inductive circuits	Automatic Rectifiers, Ltd., 75, Sancroft St., Lambeth, S.E.11.
ALBO Moulded bakelite material for switches, plug connectors, &c.	A. P. Lundberg & Sons, Ltd., 477-479, Liverpool Road, N.7.
ALL OR PART & "OFF" Tumbler switches	A. P. Lundberg & Sons, Ltd., 477-479, Liverpool Road, N.7.
ALLIGATOR Belt fasteners	J. B. Stone & Co., Ltd., 135, Finsbury Pavement, E.C.2.
ALTON Storage batteries	The Alton Battery Co., Ltd., Alton, Hants.
ANCALITE Electric cables	Callender's Cable & Construction Co., Ltd., Hamilton House, Victoria Embankment, E.C.4.
ANCHOR Tape	Callender's Cable & Construction Co., Ltd., Hamilton House, E.C.4.
ANTI-SULPHURIC Enamel	Griffiths Bros. & Co., London, Ltd., Macks Rd., S.E.16.
APEX Switch and fusegear	Foster Engineering Co., Ltd., Apex Works, South Wimbledon, S.W.19.
ARGENTA Lamps (opal)	Philips Lamps, Ltd., 145, Charing Cross Rd., W.C.2.
ARLITA Internally frosted lamps	Philips Lamps, Ltd., Philips House, 145, Charing Cross Rd., W.C.2.
ARMACELL Insulating varnish	Griffiths Bros. & Co., London, Ltd., Macks Rd., S.E.16.
ARON Electricity meters, kVA and kW M.D.I.'s, time switches, taximeters, &c.	Aron Electricity Meter, Ltd., 80, Salusbury Rd., Kilburn, N.W.6.
ARORA Electric fires, electric kettles, electrical cooking apparatus, industrial electric heaters	Arora Co., 66, Rosebery St., Loughborough, Leicestershire.

NAME AND DESCRIPTION.	MANUFACTURED BY OR OBTAINABLE FROM
ARROW Switchgear, wiring devices	Arrow Electric Switches, Ltd., 79, Gt. Queen St., Kingsway, W.C.2.
ARROW The complete line of wiring devices, reciprocating heating switches, &c.	S. G. Leach & Co., Ltd., 26-30, Artillery Lane, E.1.
ARTIC Switchboards, distribution boards, feeder pillars, kiosks, &c.	Artic Fuse & Electrical Mnfg. Co., Ltd., Birtley, Co. Durham.
ARTIC Pressure-contact self-aligning fuses and links, electric light fittings, electro-velocity radiators	Artic Fuse & Electrical Mnfg. Co., Ltd., Birtley, Co. Durham.
ARTOFEX Electric ovens for bakers and flour confectioners	Artofex Eng. Works, Ltd., 6-8, Pentonville Rd., N.1.
ASEA Single, two- and three-phase a.c. motors and generators, direct current motors and dynamos, transformers	Asea Electric, Ltd., 5, Chancery Lane, W.C.2.
ASTON Motors, dynamos and switchgear for commercial or marine use	Veritys, Ltd., Plume Works, Aston, Birmingham.
A.T.M. IN CIRCLE Telephone, telegraph, and signalling equipment	Automatic Telephone Mfg. Co., Ltd., Strowger Works, Milton Rd., Edge Lane, Liverpool.
AUTONOFF Time switch	Venner Time Switches, Ltd., 45, Horseferry Rd., S.W.1.
AVERY Boiler scales, totalisers and coal weighers	W. & T. Avery, Ltd., Soho Foundry, Birmingham.
AVERY Water weighers, weighing machines, coal meters	W. & T. Avery, Ltd., Soho Foundry, Birmingham.
AVOMETER Electrical measuring instrument ...	The Automatic Coil Winder & Electrical Equipment Co., Ltd., Winder House, Douglas Street, S.W.1.
A.W.P. Electric arc welding supplies ...	Alloy Welding Processes, Ltd., Ferry Lane Works, Forest Rd., E.17.
BAA Accumulator acid	F. W. Berk & Co., Ltd., 106, Fenchurch St., E.C.3.
BAKELAQUE Insulating material	Attwater & Sons, Hopwood St. Mills, Preston.
BAKELITE Insulating varnish	Attwater & Sons, Hopwood St. Mills, Preston.
BAKELITE Mouldings and insulating material ...	The General Electric Co., Ltd., Magnet House, Kingsway, London, W.C.2.
BAKELITE Mouldings	M-L Magneto Syndicate, Ltd., Coventry.
BAKELITE Insulating materials	The Micanite & Insulators Co., Ltd., Empire Works, Blackhorse Lane, Walthamstow, E.17.
BAKELITE Mouldings and insulating materials	The Brownie Wireless Co. of Great Britain, Ltd., Nelson St. Works, Mornington Crescent, N.W.1.
BAKELITE Synthetic resins, cement, silent gear material, &c.	Bakelite, Ltd., 68, Victoria St., S.W.1.
BAKELITE Moulding materials, laminated sheets, varnishes, &c.	Bakelite, Ltd., 68, Victoria St., S.W.1.
BAKELITE Mouldings and insulating materials	Thomas de la Rue & Co., Ltd., Shernhall St., Walthamstow, E.17.
BALLSOK Admiralty pattern insulating beads	Lionel Robinson & Co., 3, Staple Inn, W.C.1.
BARDISK Indicators for bells, motor vehicles, &c.	S. Taylor & Sons, 38a, St. Martin's Lane, W.C.2.
BARRONIA Condenser tubes, castings, rod, sheet and ingot	Barronia Metals, Ltd., 59, Parson's Green Lane, S.W.6.
BARWICK Starters and regulators	Donovan & Co., 47, Cornwall St., Birmingham.
BATTERSEA Carbon brushes	Morgan Crucible Co., Ltd., Battersea Works, Church Rd., S.W.11.
BATWIN Small motors	Power Contracts (Batwin), Ltd., 138, Southwark St., S.E.1.
B.C.M./A.T.M. Telephone and telegraph equipment, electric heating and cooking appliances, mine signalling apparatus	Automatic Telephone Mfg. Co., Ltd., Strowger Works, Milton Rd., Edge Lane, Liverpool.
B. & D. Electric drills	Gerrard & Co., Ltd., 15-19, Gt. Titchfield St., W.1.
BEANCO Switches	Baxendale & Co., Ltd., Miller St., Manchester.
BEANCO Dry cells	Baxendale & Co., Ltd., Miller St., Manchester.
BEANCO Lampholders	Baxendale & Co., Ltd., Miller St., Manchester.
B.E.C. Motors, starting gear, controllers ...	British Electric Co., 25-29, Lower Rd., Rotherhithe, S.E.16.

NAME AND DESCRIPTION.	MANUFACTURED BY OR OBTAINABLE FROM
BECOL Ebonite	The British Ebonite Co., Ltd., Nightingale Rd., Hanwell, W.7.
BECOLATE Composite material, high temperature insulating material	The British Ebonite Co., Ltd., Nightingale Rd., Hanwell, W.7.
B.E.L. High frequency apparatus, electrodes and spares	Metro-Vick Supplies (Props. Associated Elecl. Industries, Ltd.), 155, Charing Cross Rd., W.C.2.
B.E.L.L. Decorative and special types, including Maxtrip, Candelux, signal lamps, &c.	British Electric Lamps, Ltd., Spencer Hill Rd., S.W.19.
BELLEROID Insulators	Barrett & Elers, Ltd., Dace Road, E.3.
B.E.M. Motors	Brittain's Electric Motor Co., formerly Langdon-Davies Elec. Motor Co., Eastdown Works, Dermody Rd., Lewisham, S.E.13.
BERGMANN Fans, motors, cables	The Bergmann Electric Co., Ltd., 82, Victoria St., S.W.1.
BERLINER Automatic and telephone apparatus	Shipton Automatic Telephone System, Ltd., Caxton House, Tothill St., S.W.1.
BERRY Transformers	British Electric Transformer Co., Ltd., Hayes, Middlesex.
BERRYS Joint box compounds, troughing compounds, sleeve compounds	Berrys Compounds, Ltd., Short Rd., Stratford Market, E.15.
BERWICK Electric fires	Premier Electric Heaters, Ltd., Premier Works, St. Andrew's Road, Birmingham.
BIMETAL Non-oxidising, non-arcing fuse wire	Parmiter, Hope & Sugden, Ltd., Fluvent Electrical Works, Vernon St., Longsight, Manchester.
BIRKA Automatic "Super-Smoothwell" irons	Premier Electric Heaters, Ltd., Keeley St. and St. Andrew's Rd., Birmingham.
BLACKFRIARS Adhesive tape	Spicers, Ltd., 19, New Bridge St., E.C.4.
BLACKLEY Tape	Connolly's (Blackley), Ltd., Blackley, Manchester.
BLACO Steel screwed and grip conduit fittings	F. C. Blackwell & Co., Ltd., Great Crosby, Liverpool.
BLAIZOLITE Adjustable patent projector lantern	Norrington & Landon, Ltd., 33, Brazennose St., Manchester.
BLAKE Insulated staples	Mosses & Mitchell, Ltd., Chiswell Works, 60-64, Ironmonger Row, E.C.1.
BLUE LABEL Dry cell	Standard Telephones & Cables, Ltd., Columbia House, Aldwych, W.C.2.
BONDIT Special bonded wiring system and fittings	W. T. Henley's Telegraph Works Co., Ltd., Holborn Viaduct, E.C.1.
BOREAS Air compressors, vacuum pumps, pneumatic equipment	Lacy-Hulbert & Co., Ltd., Boreas Works, Beddington, Croydon.
BOTRADE I.C. switches and distribution boards	S. Bill & Co., Ltd., Queen's Rd., Aston, Birmingham.
BRIGHTRAY Nickel-chromium resistance wires and tapes for elements in electric furnaces, fires, &c.	Henry Wiggin & Co., Ltd., Wiggin St., Birmingham.
BRITANNIA Stationary lead accumulators for all purposes, accumulators for electric vehicles, motor-car and motor-cycle starting and lighting batteries	Britannia Batteries, Ltd., Britannia House, 233, Shaftesbury Avenue, W.C.2.
BRITMAC Electrical accessories	C. H. Parsons, Ltd., Britannia Works, Tyseley, Birmingham.
BRITTAIN Motors	Brittain's Electric Motor Co., formerly Langdon-Davies Elec. Motor Co., Eastdown Works, Dermody Rd., Lewisham, S.E.13.
BROWNIE Wireless receivers and components ...	The Brownie Wireless Co. of Gt. Britain, Ltd., Nelson St. Works, Mornington Crescent, N.W.1.
BRUCE Street lighting lantern	The Wardle Engg. Co., Ltd., Elsinore Rd., Old Trafford, Manchester.
BRUSH Tramcars, tramcar trucks, motor-'bus bodies	The Brush Electrical Engineering Co., Ltd., Falcon Works, Loughborough.
BRUSH Transformers, motors and generators, liquid starters	The Brush Electrical Engineering Co., Ltd., Falcon Works, Loughborough.
BRUSH-LJUNGSTROM Steam turbo-generators	The Brush Electrical Engineering Co., Ltd., Falcon Works, Loughborough.
BRUSTON Pumping installations, lighting plants, oil burners	G. C. Pillinger & Co., 53, Victoria St., S.W.1.
B.T.H. Electrical equipment	British Thomson-Houston Co., Ltd., Rugby.

NAME AND DESCRIPTION.	MANUFACTURED BY OR OBTAINABLE FROM
BULL Motors and dynamos	Bull Motors, Ltd., Ipswich, England.
BUSY BEE Vacuum cleaner	Drake & Gorham Wholesale, Ltd., 67, Long Acre, W.C.
CABLEGRIP Cable boxes	W. T. Henley's Telegraph Works Co., Ltd., Holborn Viaduct, E.C.1.
CAB TYRE Cab tire sheathed wires and cables of all types	St. Helens Cable & Rubber Co., Ltd., Slough.
CAB TYRE Electrical cables	W. T. Henley's Telegraph Works Co., Ltd., Holborn Viaduct, E.C.1.
CAB TYRE Cab-tire sheathed wires and cables of all types	W. T. Glover & Co., Ltd., Trafford Park, Manchester.
CAB TYRE Cab-tyre sheathed cables and wires	Siemens Bros. & Co., Ltd., Woolwich, S.E.18.
CABTYRIT Corrosion-resisting rubber	St. Helens Cable & Rubber Co., Ltd., Slough.
CADURO Cadmium copper wire for trolley and transmission purposes	Richard Johnson & Nephew, Ltd., Bradford Iron Works, Manchester.
CALLENDER Feeder and transformer pillars, joint box compounds, disconnecting joint boxes	Callender's Cable & Construction Co., Ltd., Hamilton House, E.C.4.
CALLENDER Electric cables of all types	Callender's Cable & Construction Co., Ltd., Hamilton House, Victoria Embankment, E.C.4.
CALORA Electric heating pads, foot-warming mats, &c.	M. E. du Bois & Co., 25, Redcross St., E.C.1.
CAMBRIDGE Instruments	Cambridge Instrument Co., Ltd., 45, Grosvenor Place, S.W.1.
CANVARY Electric water heater	Berry's Electric, Ltd., 85-6, Newman St., W.1.
CASTLE Dynamos, motors, switchgear ...	J. H. Holmes & Co., Ltd., Portland Rd., Newcastle-on-Tyne.
CECIL Resistances, fan regulators, dimmers	Mansell & Ogan, Ltd., 15-16, Floral St., Covent Garden, W.C.2.
CELEC Sliding resistances, dimmers, cinema resistances, and charging boards	Curtis Mfg. Co., Ltd., Conduit Place, W.2.
CENTURY Single-phase repulsion induction motors, two- and three-phase automatic start motors, fractional h.p. split phase motors	Asea Electric, Ltd., 5, Chancery Lane, W.C.2.
CENTURY D.c. volt-ammeter test set	Elliott Bros. (London), Ltd., Century Works, Lewisham, S.E.13.
C. & H. Electricity meters and instrument transformers	Chamberlain & Hookham, Ltd., Solar Works, New Bartholomew St., Birmingham.
C.H. Hand-operated and self-acting electric motor controlling apparatus and wireless components	Igranic Electric Co., Ltd., 149, Queen Victoria St., E.C.4.
CHANGE COIL Multi-range electrical testing set ...	Record Electrical Co., Ltd., Broadheath, Altrincham, Cheshire.
CHASLYN Patent gravity ball hydrometer ...	J. H. Collie & Co., 10, Canning Place, Liverpool.
CHROMALOX Electric heating units	Geo. Bray & Co., Ltd., Leeds.
CIRSCALE Electrical measuring instruments ...	Record Electrical Co., Ltd., Broadheath, Altrincham, Cheshire.
CITY Motors, a.c. and d.c.	City Electrical Co., 1, Emerald St., W.C.1.
CLARITONE Loudspeakers and headphones ...	Automatic Telephone Mfg. Co., Ltd., Milton Rd., Edge Lane, Liverpool.
CLASSIC Pulpit, desk, piano, organ and car fittings	The Lodge Fittings Co., Ltd., 57, Albert Rd., Aston, Birmingham.
CLEMATEITE Arc-proof asbestos sheets and mouldings	Dacier, Ltd., 8, 10 & 12, Wagner St., Old Kent Rd., S.E.15.
CLIFTEX Insulating tape	Mosses & Mitchell, Ltd., Chiswell Works, 60-64, Ironmonger Row, E.C.1.
COCUSITE (Regd.) Moulded bakelite material for accessories	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
COLECTRIC A system of heating combining central heating with electricity for topping up	Berry's Electric (1928), Ltd., 85-86, Newman St., Oxford St., W.1.
COLUMBUS Automatic staircase time-lag switches	Elkay Electrical Manufacturing Co., Ltd., 4, Southampton Row, W.C.1.
COMPELLA Large bells for alarm-call and traffic-operating on a.c or d.c.	Cox-Walkers, North Eastern Elec. Works, Darlington.
CONCORD Wires and cables	Concordia Electric Wire Co., Ltd., Trent Mills, New Sawley, near Nottingham.
CONSTELLARAY Floodlight fittings	Central Electrical Engineers' Assoc., Supply, Ltd., 198, Bethnal Green Rd., E.2.

NAME AND DESCRIPTION.	MANUFACTURED BY OR OBTAINABLE FROM
COOLEX ADJUSTA Fuseboards and ironclad switches ...	United Elec. Co. (Birmingham), Ltd., Coolex Works, Penn St., Birmingham.
CORNWALL Regulators and dimmers	Donovan & Co., 47, Cornwall St. Birmingham.
COSMOS Lamps	Metropolitan-Vickers Electrical Co., Ltd., Trafford Park, Manchester.
COSYGLO Imitation coal fires	Automatic Telephone Mfg. Co., Ltd., Strowger Works, Milton Rd., Edge Lane, Liverpool.
COUNTESS Electric fires	Premier Electric Heaters, Ltd., Premier Works, St. Andrew's Rd., Birmingham.
COXPAR Voltage regulator	Cox-Walker & Partners, Darlington.
CRABTREE (Regd.) Switches, accessories and switchgear	J. A. Crabtree & Co., Ltd., Lincoln Works, Walsall.
CRACORE Twin and three-core solid bitumen cables, cab tire sheathed trailing cables	W. T. Glover & Co., Ltd., Trafford Park, Manchester.
CREDA Heating and cooking appliances ...	Credenda Conduits Co., Ltd., Oldbury, Birmingham.
CRESCENT Electric fires	Hirst, Ibbetson & Taylor, Ltd., 7 & 7a, Blackfriars St., Manchester.
CRESSALL Resistance nets, regulators, unit heaters	Cressall Mfg. Co., Eclipse Works, 31 & 32, Tower St., Birmingham.
CRYPTO Generators and motors (a.c. and d.c.), constant potential equipments, commutating rectifiers, cinema arc sets, &c.	The Crypto Electrical Co., Ltd., Acton Lane, Willesden, London, N.W.10, associated with The Lancashire Dynamo and Motor Co., Ltd., Trafford Park, Manchester.
CRYSELCO Electric lamps	Cryselco, Ltd., Kempston Works, Bedford.
C.T.S. Cab tire sheathed wires and cables of all types	St. Helens Cable & Rubber Co., Ltd., Slough.
C.T.S. Electrical cables	W. T. Henley's Telegraph Works Co., Ltd., Holborn Viaduct, E.C.1.
C.T.S. Cab tyre sheathed wires and cables of all types	W. T. Glover & Co., Ltd., Trafford Park, Manchester.
C.T.S. Cab-tyre sheathed wires and cables	Callender's Cable & Construction Co., Ltd., Hamilton House, E.C.4.
C.T.S. Cab tyre sheathed cables and wires	Siemens Bros. & Co., Ltd., Woolwich, S.E.18.
CUMULUS Electric water heaters	Nathan & Allen, Ltd., 25, Victoria St., London, S.W.1.
DAMARDA Lacquer	Bakelite, Ltd., 68, Victoria St., S.W.1.
DAVID Electric irons, elements and sundries	Chesterton, Jones & Co., Ltd., "David Works," Rushey Lane, Tyseley, Birmingham.
DAVIDSON Electric fires	Chesterton, Jones & Co., Ltd., "David Works," Rushey Lane, Tyseley, Birmingham.
DECO Patent limit switches, cable reeling drums, and special control devices for handling plants	Dalyte Electrical Co., Deco Engg. Works, West Row, N. Kensington, W.10.
DELTA Bell batteries	Falk, Stadelmann & Co., Ltd., Efesca Electrical Works, 83-93, Farringdon Road, E.C.1.
DESCO Fuses, distribution gear and switchboards	G. P. Dennis, Ltd., 66, South John St., Liverpool.
DIALITE Electric cables	St. Helens Cable & Rubber Co., Ltd., Slough.
DIAMOND Seal padlocks for slot meters ...	The Tourtel Mfg. Co., 48, Uxbridge Rd., Ealing, W.5.
DIAMOND H. Switches all types, temperature control apparatus	Hart Manufacturing Co., 76-76b, Rochester Row, S.W.1.
DIATRINE Diatrine paper-insulated cable ...	W. T. Glover & Co., Ltd., Trafford Park, Manchester.
DICTOGRAPH House and office telephones	Dictograph Telephones, Ltd., Aurelia Rd., Croydon.
DIX-ONEMETER Multi-range portable testing meter for current and volts with interchangeable multipliers	Leslie Dixon & Co., 218, Upper Thames St., E.C.4.
DOLPHIN Electric cookers, fires and other domestic electric appliances	Domestic Electrification, Ltd., Townsend House, Greycoat Place, Westminster, S.W.1.
DOMINION Wireless receivers and components	The Brownie Wireless Co. of Great Britain, Ltd., Nelson St. Works, Mornington Crescent, N.W.1.
DOMINO Flat two-pin and two-pin "earth" extension connectors	A. P. Lundberg & Sons, Ltd., 477-479, Liverpool Road, N.7.
DONLOK Switches and switch plugs	Donovan & Co., 47, Cornwall St.. Birmingham.

NAME AND DESCRIPTION.	MANUFACTURED BY OR OBTAINABLE FROM
DOT Two-pin plug connectors and switch plugs (B.E.S.A. 2 amps.)	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
DOUGLAS Automatic coil winder	The Automatic Coil Winder & Electrical Equipment Co., Ltd., Winder House, Douglas St., S.W.1.
DOWSING'S Electric heating and medical appliances	Dowsing Radiant Heat Co., Ltd., Bollo Lane, Acton, W.3, and 91-3, Baker St., W.1.
D.P. Storage batteries	The D.P. Battery Co., Ltd., Bakewell, Derbyshire.
DRAKA Cables	Electric Cables, Ltd., 25, Old Street, E.C.1.
DUFLEX Control of pendulums in existing turret clocks	Gent & Co., Ltd., Faraday Works, Leicester.
DULRAE Electric warming panels	Dulrae Manufacturing Co., Ltd., 4, Bloomsbury Place, W.C.1.
DUNDEE Adhesive protecting tape	William Geipel, Ltd., Vulcan Works, 156-170, Bermondsey St., S.E.1.
DUO-SAVELITE Double filament lamp	Philips Lamps, Ltd., 145, Charing Cross Rd., W.C.2.
DUPLEX Electric floor polisher, portable electric sander, appliances for hairdressers	Electrona Electrical Products, Ltd., 13, Friday St., Manchester.
DUPLEX Two-way tumbler switch with "off" position	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
DUPLO Motor-car lamps	Philips Lamps, Ltd., Philips House, 145, Charing Cross Rd., W.C.2.
DUREX Electric wiring system for C.T.S. or L.C. cables	Simplex Conduits, Ltd., Garrison Lane, Birmingham.
E Control gear, &c.	Geo. Ellison, Ltd., Perry Barr, Birmingham.
EBOLITE Insulated switches of moulded composition	S. G. Leach & Co., Ltd., 26-30, Artillery Lane, E.1.
EDGEWISE Narrow flush single-way, two-way, two-way and off, &c., switches	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
EDISWAN Dry batteries	The Edison Swan Electric Co., Ltd., 123-5, Queen Victoria St., E.C.4.
EFA Incandescent and arc equipment for film and photographic lighting	Korting & Mathiesen Electrical, Ltd., 711-715, Fulham Rd., S.W.6.
EFCO Resistance furnace, for heat treatment of metal, pottery kilns, enamelling, &c.	Electric Furnace Co., Ltd., 17, Victoria St., S.W.1.
EFESCA Switches, batteries, lampholders ...	Falk, Stadelmann & Co., Ltd., Efesca Electrical Works, 83-93, Farringdon Road, E.C.1.
ELASTRONG Mechanical rubbers of all types ...	St. Helens Cable & Rubber Co., Ltd., Slough.
ELASTUMEN Cable	Johnson & Phillips, Ltd., Charlton, S.E.
ELECT Cooking and heating apparatus, kettles, irons, fires, &c.	The Electric Heating Co., George St., Croydon.
ELECTRICFLAME Fires	The Electric Heating Co., George St., Croydon.
ELECTRICOAL (HEATRAE) Imitation coal fires	Electric Fires, Ltd., Heatrae Works, Norwich.
ELECTRIC TRANSMISSION Transmission line accessories, bushings, pole top switchgear	Electric Transmission, Ltd., Culford Works, Kingsbury Rd., Islington, N.1.
ELECTROFLO Industrial instruments	Electroflo Meters Co., Ltd., Abbey Rd., Park Royal, N.W.10.
ELECTRO-VAPOUR Radiators	Benham & Sons, Ltd., 66, Wigmore St., W.1.
ELEPHANTIDE Insulating pressboards	B. S. & W. Whiteley, Ltd., Pool-in-Wharfedale, Nr. Leeds.
ELGEE Electricity meters, time switches, and instrument transformers	Landis & Gyr, Ltd., Elgee Works, Victoria Rd., North Acton, W.3.
ELIMAFUSE Small circuit breakers for lighting, heating and power circuits	Industry & Commerce Alliance, Ltd., Clare House, 55-59, Kingsway, W.C.2.
ELIMINAIR Feed water deaerator	Richardsons, Westgarth & Co., Ltd., Hartlepool.
ELIXUM Quick make and break switch and fuse, ironclad fuses	Sykes & Dyson, Ltd., Queen's Mill Rd., Huddersfield.
ELLIOTT Electrical measuring instruments of all kinds	Elliott Bros. (London), Ltd., Century Works, Lewisham, S.E.13.
ELLISON Circuit breakers, electric	Geo. Ellison, Ltd., Perry Barr, Birmingham.
ELLISON Plastic insulating compound	Geo. Ellison, Ltd., Perry Barr, Birmingham.

NAME AND DESCRIPTION.	MANUFACTURED BY OR OBTAINABLE FROM
ELLMAR Bakelite mouldings for insulating and all electrical requirements	The Ellmar Mouldings Co., Thimble Mill Lane, Birmingham.
ELMANCO Square universal house wiring box for lead-covered systems	Baxter & Caunter, Ltd., 219, Tottenham Court Rd., W.1.
ELMITE Circular moulded universal wiring box for use with C.T.S. cables	Baxter & Caunter, Ltd., 219, Tottenham Court Rd., W.1.
EMPIRE Insulating cloth and tape	Attwater & Sons, Hopwood Street Mills, Preston.
EMPIRE Insulating cloths, tapes, silks, papers and tubes	The Micanite & Insulators Co., Ltd., Empire Works, Blackhorse Lane, Walthamstow, E.17.
ENA Electric fires, electric heating elements	Ena Electrical Appliances, Ltd., Ena Works, 30, Church Rd., N.1.
ENDOLAC High grade black spirit insulating varnish for finishing coat on armatures and fields	Pinchin, Johnson & Co., Ltd., General Bldgs., Aldwych, W.C.2.
ENDURAL Special cables and compound ...	W. T. Henley's Telegraph Works Co., Ltd., Holborn Viaduct, E.C.1.
ENFIELD Cables	The Enfield Cable Works, Ltd., Lincoln House, 296-302, High Holborn, W.C.1.
ENSIGN Lampholders, wall plugs, &c. ...	General Accessories Co., Ltd., 18-22, Euston Buildings, George St., N.W.1.
E.P.S. Accumulators	Pritchett & Gold & E.P.S. Co., Ltd., 50, Grosvenor Gdns., S.W.1.
EQUATORIAL Cable	W. T. Henley's Telegraph Works Co., Ltd., Holborn Viaduct, E.C.1.
EQUILUXO A special type of glassware ...	The General Electric Co., Ltd., Magnet House, Kingsway, London, W.C.2.
ESLA Street-lighting "Bi-Multi" reflectors	Electric Street Lighting Apparatus Co., The Foundry, Canterbury.
ESSELL Insulating varnished cloth, papers, tapes, &c.	Spicers, Ltd., 19, New Bridge St., E.C.4.
EVER READY Dry cells, batteries, and electric lamps (portable)	Ever Ready Co. (Great Britain), Ltd., Hercules Place, N.7.
EVERAY High frequency, violet ray apparatus	I. Calvete, Ltd., 11, Little Saint Andrew St., St. Martin's Lane, W.C.2.
EXALT Switches, switch-plugs, &c.	General Accessories Co., Ltd., 18-22, Euston Buildings, George St., N.W.1.
EXAUTO Time switch	Venner Time Switches, Ltd., 45, Horseferry Rd., S.W.1.
EXPRESO Quick make-and-break switches and switch-plugs	General Accessories Co., Ltd., 18-22, Euston Buildings, George St., N.W.1.
FABROIL Non-metallic gears	British Thomson-Houston Co., Ltd., Rugby.
FAIRYLAND Lighting strip	Imperial Lighting Co. (Implitico), Ltd., 2-6, Pocock St., S.E.1.
F.A.P. Conduit and fittings and accessories	Fitter & Poulton, Ltd., Vincent Parade, Balsall Heath, Birmingham.
FARRINGDON Bells	Falk, Stadelmann & Co., Ltd., Efesca Electrical Works, 83-93, Farringdon Rd., E.C.1.
FERRANTI Radio receivers	Ferranti, Ltd., Hollinwood, Lancs., and Bush House, W.C.2.
FERRANTI Radio components	Ferranti, Ltd., Hollinwood, Lancs., and Bush House, London, W.C.2.
FERRANTI Radiant fires	Ferranti, Ltd., Hollinwood, Lancs., and Bush House, London, W.C.2.
FERRANTI Water heaters	Ferranti, Ltd., Hollinwood, Lancs., and Bush House, London, W.C.2.
FERRANTI Switchboard instruments	Ferranti, Ltd., Hollinwood, Lancs., and Bush House, London, W.C.2.
FERRANTI Power transformers	Ferranti, Ltd., Hollinwood, Lancs., and Bush House, London, W.C.2.
FERRANTI Electricity meters	Ferranti, Ltd., Hollinwood, Lancs., and Bush House, London, W.C.2.
FERRY Low temperature-coefficient, nickel-copper resistance wires and tapes for motor starters, &c.	Henry Wiggin & Co., Ltd., Wiggin St., Birmingham.

NAME AND DESCRIPTION.	MANUFACTURED BY OR OBTAINABLE FROM
FIBRE Insulating materials	Mosses & Mitchell, Ltd., Chiswell Works, 60-64, Ironmonger Row, E.C.1.
FIBRE Insulating sheet, rod and tube ...	The Micanite & Insulators Co., Ltd., Empire Works, Black horse Lane, Walthamstow, E.17.
FIREBLAZE Magicoal fire	Berry's Electric (1928), Ltd., 85-86, Newman St., Oxford St W.1.
FIRIMINE Fuse switches	Berry's Electric (1928), Ltd., 85-86, Newman St., Oxford St W.1.
FISH-SPINE Admiralty-pattern insulating beads	Taylor, Tunnicliff (Refractories), Ltd., 110, Cannon St., E.C.4
FLAMINGO Electric fires	British Electric Transformer Co., Ltd. (Sunray Tricity Dept.) Wellington House, 125-130, Strand, W.C.2.
FLEXOTUBE Insulated sleeving	John MacLennan & Co., 115, Newgate St., E.C.1.
FLUVENT Distribution fuse boxes	Parmiter, Hope & Sugden, Ltd., Fluvent Electrical Works Vernon St., Longsight, Manchester.
FORMALITE Moulding powders	The Micanite & Insulators Co., Ltd., Empire Works, Black horse Lane, Walthamstow, E.17.
FORMAPEX Insulating varnish, moulding mixtures, miocarta sheet and tubes	The Ioco Rubber & Waterproofing Co., Ltd., Netherton Works, Anniesland, Glasgow, W.3.
FORMITE Bakelite moulding materials ...	Bakelite, Ltd., 68, Victoria St., S.W.1.
FOSTER Transformers, kiosks, &c.	Foster Engineering Co., Ltd., Apex Works, South Wimbledon, S.W.19.
FRANCIS Lamp locks in brass and bakelite	Francis Lamp Locks, Ltd., 2, 3 & 4, Cockspur St., S.W.1.
FROUDE Dynamometers and wind tunnel testing plants	Heenan & Froude, Ltd., Worcester, England.
FULLER Transformers, single, two- and three-phase induction motors, motor starters	Fuller Elecl. & Mnfg. Co., Ltd., 5, Chancery Lane, W.C.2.
FULLOLITE Lamps	Edison Swan Electric Co., Ltd., 123-5, Queen Victoria St., E.C.4.
FURSE Cinema curtain controllers and dimmers, organ and orchestra lifts	W. J. Furse & Co., Ltd., Traffic St., Nottingham.
GAMEWELL Fire alarm systems	Standard Telephones & Cables, Ltd., Columbia House, Aldwych, W.C.2.
GARDY Rotary switches and fuses	Thompson & Co., 1 & 3, Old Swan Lane, E.C.4.
GECOFIX Electric light fittings of every description	The General Electric Co., Ltd., Magnet House, Kingsway, London, W.C.2.
GECOPHONE Wireless receiving sets, components and accessories	The General Electric Co., Ltd., Magnet House, Kingsway, London, W.C.2.
GECORAY Reflectors for shop-window lighting	The General Electric Co., Ltd., Magnet House, Kingsway, London, W.C.2.
GENACCO Electrical accessories	General Accessories Co., Ltd., 18-22, Euston Buildings, George St., N.W.1.
GENEX Electrical accessories	General Accessories Co., Ltd., 18-22, Euston Buildings, George St., N.W.1.
GENII Geysers, water heaters, stills, radiators, thermostats, &c.	Geo. Nobbs, Ltd., 87-89, Cleveland St., Fitzroy Sq., W.1.
GILSONITE Asphaltum, bitumen	Ashby, Morris, Ltd., 17, Laurence Pountney Lane, E.C.4.
GLASGOW-REX Ironclad switches	Midland Electric Mfg. Co., Ltd., M.E.M. Works, Barford St., Birmingham.
GLIMALAC For making up mica plates or material commonly called micanite	Pinchin, Johnson & Co., Ltd., General Bldgs., Aldwych, W.C.2.
GLOBAR Non-metallic electric heating elements and resistors	British Resistor Co., Ltd., 32, Clare Rd., Halifax, England.
GLO-CLAD Watertight and gastight electric lighting system	W. T. Glover & Co., Ltd., Trafford Park, Manchester.
GLOVERITE Insulated wires and cables for signalling and special situations	W. T. Glover & Co., Ltd., Trafford Park, Manchester.
GLOVERS Electric wires, cables and lead rubber-covered house-wiring systems	W. T. Glover & Co., Ltd., Trafford Park, Manchester.

NAME AND DESCRIPTION	MANUFACTURED BY OR OBTAINABLE FROM
GLOVOX Compound insulated mains cables ...	W. T. Glover & Co., Ltd., Trafford Park, Manchester.
GLOWRAY Nickel - chromium - iron resistance wires and tapes for elements in electric irons, toasters, &c.	Henry Wiggin & Co., Ltd., Wiggin St., Birmingham.
GLYPTANITE Super micanite sheet	The Micanite & Insulators Co., Ltd., Empire Works, Blackhorse Lane, Walthamstow, E.17.
GOBLIN Electric suction cleaner	British Vacuum Cleaner & Engineering Co., Ltd., Parsons Green Lane, S.W.6.
GRAHAM Naval telephone, band repeater and helm and engine indicator	Alfred Graham & Co., Ltd., St. Andrew's Works, Slough, Bucks.
GRIPTITE Adhesive tape	Spicers, Ltd., 19, New Bridge St., E.C.4.
HÆTANIC Nickel chrome high resistance wire	L.P.S. Electrical Co., Ltd., Ealing Road, Alperton, Middlesex.
HAILGLASS All kinds of lighting glassware ...	Hailwood & Ackroyd, Ltd., Beacon Works, Morley, Nr. Leeds.
HAMILTON BEACH Vacuum cleaners, domestic appliances, carpet washers and drink mixers	S. G. Leach & Co., Ltd., 26-30, Artillery Lane, E.1.
HARCOURT Artistic electric light fittings ...	Metropolitan-Vickers Electrical Co., Ltd., Trafford Park, Manchester.
HART Electric accumulators	Hart Accumulator Co., Ltd., Marshgate Lane, E.15.
HAZEMEYER Switchgear, &c.	Alan Wright, 117, Victoria St., S.W.1.
HEATRAE Electric fires, water heaters, oil heaters	Electric Fires, Ltd., Heatrae Works, Norwich.
HEATRAE Immersion heaters, tubular heaters, small cookers, &c.	Electric Fires, Ltd., Heatrae Works, Norwich.
HEENAN Air coolers, water coolers and electric dynamometers	Heenan & Froude, Ltd., Worcester, England.
H.E.K. Cables and fittings of all descriptions, glassware, wireless sets	H. E. Kettle, Ltd., St. Peters St., Maidstone.
HELENITE Electric cables	St. Helens Cable & Rubber Co., Ltd., Slough.
HELSBY Condensers for telephone, telegraph and power factor improvement	British Insulated Cables, Ltd., Prescot, Lancs.
HELSBY Cords (telephone and switchboard)	British Insulated Cables, Ltd., Prescot, Lancs.
HELSBY Rubber-insulated cables	British Insulated Cables, Ltd., Prescot, Lancs.
HELSBY Wiring systems	British Insulated Cables, Ltd., Prescot, Lancs.
HENLEX Special compound insulation	W. T. Henley's Telegraph Works Co., Ltd., Holborn Viaduct, E.C.1.
HENLEY Link or fuse disconnecting boxes	W. T. Henley's Telegraph Works Co., Ltd., Holborn Viaduct. E.C.1.
HENLEY Distribution pillars	W. T. Henley's Telegraph Works Co., Ltd., Holborn Viaduct. E.C.1.
HENLEY Tape	W. T. Henley's Telegraph Works Co., Ltd., Holborn Viaduct, E.C.1.
HENLEY Cables of all types	W. T. Henley's Telegraph Works Co., Ltd., Holborn Viaduct, E.C.1.
HENLEY Joint box compounds	W. T. Henley's Telegraph Works Co., Ltd., Holborn Viaduct, E.C.1.
HENLEY Plywood backboards	W. T. Henley's Telegraph Works Co., Ltd., Holborn Viaduct, E.C.1.
HENLEY WIRING SYSTEM Special wiring system and fittings ...	W. T. Henley's Telegraph Works Co., Ltd., Holborn Viaduct, E.C.1.
HERCULACKER Automobile cables	Concordia Electric Wire Co., Ltd., Trent Mills, New Sawley, nr. Nottingham.
HERCULENE Electric cables	W. T. Henley's Telegraph Works Co., Ltd., Holborn Viaduct, E.C.1.
HERMES Bare copper wire and strip, cotton covered and braided wire and strip, light cables and flexibles	Rd. Johnson, Clapham & Morris, Ltd., St. Mary's Rd., Newton Heath, Manchester.

NAME AND DESCRIPTION.	MANUFACTURED BY OR OBTAINABLE FROM
HEROULT Electric furnace, arc type for steel and nickel melting	Electric Furnace Co., Ltd., 17, Victoria St., S.W.1.
HINGELESS Fuseboard (non-corrodible, detachable)	S. Bill & Co., Ltd., Queen's Rd., Aston, Birmingham.
HITEST Cables	Falk, Stadelmann & Co., Ltd., Efesca Electrical Works, 83-93, Farringdon Rd., E.C.1.
HOFFMANN Ball and roller bearings, steel balls and rollers	Hoffmann Mfg. Co., Ltd., Chelmsford, Essex.
HOLDERS Turned and repetition parts in brass or steel, metal stampings, electric lampholders and fittings	Holders, Ltd., West Silvermills, Edinburgh.
HOLOPHANE Scientific lighting	Holophane, Ltd., Elverton St., Vincent Sq., S.W.1.
HOMESTEAD Irons	Baxendale & Co., Ltd., Miller St., Manchester.
HOMESTEAD Fires	Baxendale & Co., Ltd., Miller St., Manchester.
HOT-POINT Electric irons, soldering irons and branders	Dowsing Radiant Heat Co., Ltd., Bollo Lane, Acton, W.3, and 91-3, Baker St., W.1.
HOTPOINT Domestic electric appliances	Hotpoint Electric Appliance Co., Ltd., 24, Newman St., Oxford St., W.1.
HOTPOINT-FALCO Electric cookers	Hotpoint Electric Appliance Co., Ltd., 24, Newman St., Oxford St., W.1.
H.W.S. Special wiring system and fittings ...	W. T. Henley's Telegraph Works Co., Ltd., Holborn Viaduct, E.C.1.
HYPER-SCALE Electrical measuring instruments ...	Nalder Bros. & Thompson, Ltd., 97a, Dalston Lane, E.8.
ICALL Electro-medical apparatus, electrical equipment for hairdressers	I. Calvete, Ltd., 59-61, North Street, Clapham, S.W.4.
IDEAL Electrical measuring instruments and relays of all types	Nalder Bros. & Thompson, Ltd., 97a, Dalston Lane, E.8.
I. & F. Controller fingers, contacts and colliery coal-cutter spares and renewals	Imeson & Finch, "Empress" Works, Stockton-on-Tees.
IGRANIC All types of electric motor starting and motor controlling apparatus and wireless components	Igranic Electric Co., Ltd., 149, Queen Victoria St., E.C.4.
IGRANIC-PACENT Radio components for wireless receiving sets	Igranic Electric Co., Ltd., 149, Queen Victoria St., E.C.4.
IMP (Regd.) Flat tumbler switches and switch plugs	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
IMPERIAL Conduit tubes and accessories ...	Isaac Griffiths & Sons (Proprietors: James McDougall, Ltd.), Imperial Works, Wednesbury, Staffs.
IMPERIAL Electric stage equipment	Imperial Lighting Co. (Implitico), Ltd., 2-6, Pocock St., S.E.1.
IMPREGNITE Black, solid, impregnating compound for treating all types of coils having a great depth of wire	Pinchin, Johnson & Co., Ltd., General Bldgs., Aldwych, W.C.2.
INKWELL Recording instruments	Everett, Edgcumbe & Co., Ltd., Colindale Works, Hendon, N.W.9.
INTERMEDIATE Tumbler switch for control of lamps from more than two positions	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
INVENTUM Fires, cookers, water heating and domestic appliances	Alan Wright, 117, Victoria St., S.W.1.
INVENTUM Electric fires, electric water taps, electric cisterns	W. C. Yuille & Co., Ltd., 155a, St. Vincent St., Glasgow, C.2.
INVENTUM Electric fires, water heating and cooking appliances	Inventum Electrical Appliances, Sales Dept., 117, Victoria St., S.W.1. (Alan Wright, Sole Agent, Gt. Britain and Colonies).
INVENTUM Radiators, water heaters, &c. ...	W. E. Beardsall & Co., Ltd., 5, Victoria Bridge, Manchester.
IRONSAFE Switchboards	Berry's Electric (1928), Ltd., 85-86, Newman St., Oxford St., W.1.
ISCO Ironclad service cutouts	W. T. Henley's Telegraph Works Co., Ltd., Holborn Viaduct, E.C.1.

NAME AND DESCRIPTION.	MANUFACTURED BY OR OBTAINABLE FROM
ISOLAC An acid and waterproof, air drying and baking insulating varnish of high electrical resistance, and permanent plasticity	Pinchin, Johnson & Co., Ltd., General Bldgs., Aldwych, W.C.2.
JACELITE (Regd.) Moulded accessories	J. A. Crabtree & Co., Ltd., Lincoln Works, Walsall.
JACKSON Electric cookers, fires, kettles, breakfast cookers, &c.	The Jackson Electric Stove Co., Ltd., 143, Sloane St., S.W.1.
J.L. Universal wiring clips	Walter Balmford, M.I.E.S., "Electric House," 116, Steelhouse Lane, Birmingham.
J. & P. Wiring system	Johnson & Phillips, Ltd., Charlton, S.E.
KALANITE Insulating material	Callender's Cable & Construction Co., Ltd., Hamilton House, Victoria Embankment, E.C.4.
KALANOID Plastic waterproof compound ...	Callender's Cable & Construction Co., Ltd., Hamilton House, Victoria Embankment, E.C.4.
KALBITUM Anti-corrosive paint	The Anchor Cable Co., Ltd., Leigh, Lancs.
KALECORE Electric cables	Callender's Cable & Construction Co., Ltd., Hamilton House, Victoria Embankment, E.C.4.
KALEECO Electric wiring system	Callender's Cable & Construction Co., Ltd., Hamilton House, Victoria Embankment, E.C.4.
KALIBOND Lead-sheathed cable having special bonding wire	Callender's Cable & Construction Co., Ltd., Hamilton House, Victoria Embankment, E.C.4.
KANDEM Lighting fittings, electricity meters and arc lamps for all purposes	Korting & Mathiesen Electrical, Ltd., 711 and 715, Fulham Rd., S.W.6.
KANTARK Fuses, cut-outs and distribution boards	Midland Electric Mfg. Co., Ltd., M.E.M. Works, Barford St., Birmingham.
KATHANODE Storage batteries	The D.P. Battery Co., Ltd., Bakewell, Derbyshire.
KEEPALITE Emergency lighting system	The Chloride Electrical Storage Co., Ltd., Clifton Junction, near Manchester.
KEY FIBRE CONDUIT Conduit for underground cables and bird guards	Key Engineering Co., Ltd., 4, Queen Victoria St., E.C.4.
KILARC (Regd.) Positive action quick make and break tumbler switches	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
KINARKO Carbons for cinematograph work, &c.	The General Electric Co., Ltd., Magnet House, Kingsway, London, W.C.2.
KINGSNORTH Joint box compounds, electrical filling compounds, sleeve compounds	Berry, Wiggins & Co., Ltd., Tensulam House, Water Lane, Stratford, E.15.
KINGSWAY Combined switch and plug	The General Electric Co., Ltd., Magnet House, Kingsway, London, W.C.2.
KLYMAX Single and two-way narrow-panel tumbler switches	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
KOMET Electric heating appliances	Electric Heating & Hardware, Ltd., Crown Works, Berkley St., Birmingham.
KONFORM Switch plug	Berry's Electric (1928), Ltd., 85-86, Newman St., Oxford St., W.1.
K-RAY Concealed lighting of signs, showcases, posters, shop facias, &c.	A. W. Beuttell, Ltd., 96, Victoria St., S.W.1.
KWIKWIRE Lampholders and tumbler switches	J. H. Tucker & Co., Ltd., King's Rd., Tyseley, Birmingham.
KYE Electric lamps	The British Elec. Transformer Co., Ltd., (Sunray Tricity Dept.), Wellington House, 125-130, Strand, W.C.2.
LANCASHIRE Generators and motors, synchronous motors, turbo-alternators, &c.	Lancashire Dynamo & Motor Co., Ltd., Trafford Park, Manchester, associated with The Crypto Electrical Co., Ltd., Acton Lane, Willesden, N.W.10.
LATASCALE Indicating instruments	Elliott Bros. (London), Ltd., Century Works, Lewisham, S.E.13.
LAURIE & INGLEFIELD Travelling lights and stretching pendants	Thos. Laurie & Co., Ltd., West End, Falkirk.

NAME AND DESCRIPTION.	MANUFACTURED BY OR OBTAINABLE FROM
LEATHEROID Insulating materials	Mosses & Mitchell, Ltd., Chiswell Works, 60-64, Ironmonger Row, E.C.1.
LEATHEROID Insulating materials	Attwater & Sons, Hopwood St. Mills, Preston.
LEATHEROID Insulating materials	The Micanite & Insulators Co., Ltd., Empire Works, Blackhorse Lane, Walthamstow, E.17.
L.E.C. Switchgear, conduits, cables and wireless accessories	The London Electrical Co., 1, Sherborne Lane, E.C.4.
LECCO Stimulator, health motor	Zimbo Products (1929), Ltd., 130, Regent St., W.1.
LECITE (Regd.) Wires and cables	The Liverpool Electric Cable Co., Ltd., Linacre Lane, Bootle, Liverpool.
LECOID (Regd.) Box filling compounds	The Liverpool Elec. Cable Co., Ltd., Bootle, Liverpool.
LEDWAY Junction box for lead-covered wiring systems	W. R. Thornton, Ltd., Barrow-in-Furness.
LEKTRIK (Regd.) Switches, plug connectors and kindred accessories	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
LEW (Regd.) Wires and cables	The London Electric Wire Co. & Smiths, Ltd., Playhouse Yard, Golden Lane, E.C.1.
LEWCOS (Regd.) Radio products	The London Electric Wire Co. & Smiths, Ltd., Playhouse Yard, Golden Lane, E.C.1.
LIMPET TAPE Adhesive insulating tape	Connollys (Blackley) Ltd., Blackley Vale Mills, Blackley, Manchester.
LINAPEX Varnished cloths, silks, and tapes ...	The Ioco Rubber & Waterproofing Co., Ltd., Netherton Works, Anniesland, Glasgow, W.3.
LINK Clips for fixing metal sheathed house wires	W. T. Henley's Telegraph Works Co., Ltd., Holborn Viaduct, E.C.1.
LINOLITE Reflector fittings for shop-window, cornice and picture lighting	A. W. Beuttell, Ltd., 96, Victoria St., S.W.1.
LITHOLITE Moulded insulators	Litholite Insulators, Ltd., 55-57, Hackney Grove, London, E.8.
LITTLE GIANT Electric and pneumatic portable hand drills	The Consolidated Pneumatic Tool Co., Ltd., Egyptian House, 170, Piccadilly, W.1.
LIVERPOOL CABLES Wires and cables	The Liverpool Electric Cable Co., Ltd., Linacre Lane, Bootle, Liverpool.
L.K. House service meters, overhead line switchgear, lighting accessories	Elkay Electrical Mfg. Co., Ltd., 4, Southampton Row, W.C.1.
L.K. Wireless all-mains electric receivers, loud-speakers, &c.	Elkay Electrical Mfg. Co., Ltd., 4, Southampton Row, W.C.1.
LOHYS Electrical sheets and stampings ...	Joseph Sankey & Sons, Ltd., Bilston, Staffs.
LORIVAL Insulating materials, rod, sheet, and tube. Specialists in cast and pressed mouldings of every description	Lorival Mfg. Co. (1921), Ltd., Norwood Works, Southall, Middlesex.
LOTEN L.T. accumulators	The Edison Swan Electric Co., Ltd., 123-5, Queen Victoria St., E.C.4.
L.P. Lamplock	G. S. Peckham & Co., 4-5, New Compton St., Charing Cross Rd., W.C.2.
L.P.S. Universal test clips	L.P.S. Electrical Co., Ltd., Ealing Rd., Alperton, Middlesex.
L.P.S. Insulated varnished silk cambric, paper, tapes and sleevings, bakelite, &c.	L.P.S. Electrical Co., Ltd., Ealing Rd., Alperton, Middlesex.
L.P.S. Magnet and resistance wires, cords and tungsten contacts	L.P.S. Electrical Co., Ltd., Ealing Rd., Alperton, Middlesex
L.P.S.-DUDLO Enamelled wire	L.P.S. Electrical Co., Ltd., Ealing Rd., Alperton, Middlesex.
LUNDBERG Switches, plug connectors and kindred accessories	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
LUXRAY Glassware lighting units	Downes & Davies, 1 & 3, Stanley St., Liverpool.
LYRIC Fittings wire	W. T. Henley's Telegraph Works Co., Ltd., Holborn Viaduct, E.C.1.

NAME AND DESCRIPTION.	MANUFACTURED BY OR OBTAINABLE FROM
M. & C. Open type switch and control gear, ironclad switch and control gear, flameproof switch and control gear	Mavor & Coulson, Ltd., 47, Broad St., Mile End, Glasgow.
MACADIE Automatic coil winder	The Automatic Coil Winder & Electrical Equipment Co., Ltd., Winder House, Douglas St., S.W.1.
MACINTOSH Paper and rubber insulated cables ...	The Macintosh Cable Co., Ltd., Derby.
MACINTOSH Wiring systems	The Macintosh Cable Co., Ltd., Derby.
MACONITE Electric wires and cables	The Macintosh Cable Co., Ltd., Derby.
MAGICLOG Electric log fires	Berry's Electric (1928), Ltd., 85-86, Newman St., Oxford St., W.1.
MAGICOAL Electric fires	Berry's Electric (1928), Ltd., 85-86, Newman St., Oxford St., W.1.
MAGNASTART High-starting torque squirrel-cage induction motors	Harland Engg. Co., Ltd., B.E.P. Works, Alloa, Scotland.
MAGNET Electric fans of every description ...	The General Electric Co., Ltd., Magnet House, Kingsway, London, W.C.2.
MAGNET Household electric appliances for heating, cooking, washing, cleaning, ironing, &c.	The General Electric Co., Ltd., Magnet House, Kingsway, London, W.C.2.
MAGNET Wiring systems for general and industrial purposes	The General Electric Co., Ltd., Magnet House, Kingsway, London, W.C.2.
MAGNET Conduits, fittings and accessories ...	The General Electric Co., Ltd., Magnet House, Kingsway, London, W.C.2.
MAGNET Batteries	The General Electric Co., Ltd., Magnet House, Kingsway, London, W.C.2.
MAGNUM Two-pin plug connectors	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
MANOR Cookers, fires, water heaters	The Manor Electric Oven & Fire Co., 303, High Rd., Chiswick, W.4.
MANSON Adhesive protecting tape	William Geipel, Ltd., Vulcan Works, 156-170, Bermondsey St., S.E.1.
MARANEX Ship wiring cables	Callender's Cable & Construction Co., Ltd., Hamilton House, E.C.4.
MARCONI Various types of valves for reception and transmission, bright and dull emitter for both general and special purposes	M.O. Valve Co., Ltd., Osram Works, Brook Green, Hammersmith.
MARELLI Electric fans	Marelli & Co., Ltd., 19-20, Garlick Hill, E.C.
MARTINS A.P. double-pole porcelain fuses ...	W. C. Martin & Co., Ltd., 12, West Campbell St., Glasgow, C.2.
MARTINDALE Commstones, portable electric blowers, motor maintenance equipment	Martindale Electric Co., Ltd., The Hyde, Hendon, N.W.9.
MARVEL Tumbler switches for variable control from two or more positions	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
MASTA Ironclad fuse-switches	Berry's Electric (1928), Ltd., 85-86, Newman St., Oxford St., W.1.
MAXEI Vacuum impregnating plant, coil and armature winding machines, coreplate varnishing machines	Soc. Anon. Machines Auxiliares Pour l'Electricité & l'Industrie, 66, Victoria St., S.W.1.
MAXIGRAPH Chart recording maximum demand instruments	Landis & Gyr, Ltd., Elgee Works, Victoria Rd., North Acton, W.3.
MAXIM Electric lamps	Poynter, Griffiths & Co., Ltd., Maxim Works, 75, Canonbury Rd., N.1.
MAXLUME Industrial and commercial lighting fittings and heating apparatus	Veritys, Ltd., Plume Works, Aston, Birmingham.
MAXTORQ Squirrel-cage type induction motors (single, two and three speed type)	Lancashire Dynamo & Motor Co., Ltd., Trafford Park, Manchester, associated with The Crypto Electrical Co., Ltd., Acton Lane, Willesden, London, N.W.10.

NAME AND DESCRIPTION.	MANUFACTURED BY OR OBTAINABLE FROM
MAYTAG Electric clothes washer	Hotpoint Electric Appliance Co., Ltd., 24, Newman St., Oxford St., W.1.
MAZDA Electric lamps	The British Thomson-Houston Co., Ltd., Crown House, Aldwych, W.C.2.
M.C.L. & REPETITION Automatic screw machine products	M.C.L. & Repetition, Ltd., Pool Lane, Langley, Birmingham.
M.E.C. Small electric motors, a.c. and d.c.	The Medical Engineering Co., Ltd., Englefield Rd., N.1.
MECVENT Organ-blowing equipments, forge blower, industrial fans, &c.	Millns Electrical Co., 17, Whitefriars St., E.C.4.
MEDIUM RESISTANCE Special high-quality dynamo sheets and stampings	Joseph Sankey & Sons, Ltd., Bilston, Staffs.
MEGGER Electrical instruments	Evershed & Vignoles, Ltd., Acton Lane Wks., London ,W.4.
MEGGERLAC Grey enamel for insulating all classes of electrical windings where heat dissipation is desired	Pinchin, Johnson & Co., Ltd., General Bldgs., Aldwych, W.C.2.
MEGOHMOID Cable materials	Lindsay & Williams, Ltd., Bennett St. Works, Ardwick, Manchester.
MEMETTE Ironclad switches	Midland Electric Mfg. Co., Ltd., M.E.M. Works, Barford St., Birmingham.
MEMS Insulated switches	Midland Electric Mfg. Co., Ltd., M.E.M. Works, Barford St., Birmingham.
MEMREX Ironclad switches	Midland Electric Mfg. Co., Ltd., M.E.M. Works, Barford St., Birmingham.
MEMSET Splitters (D.P. switch with 4 S.P. fuses)	Midland Electric Mfg. Co., Ltd., M.E.M. Works, Barford St., Birmingham.
MERSEY Motors and dynamos	City Electrical Co., 1, Emerald St., W.C.1
MERSEY CABLES Rubber-insulated wires and cables ...	Mersey Cable Works, Ltd., Linacre Lane, Bootle, Liverpool.
METROHM Insulation testing set	Everett, Edgcumbe & Co., Ltd., Colindale Works, Hendon, N.W.9.
MICA Block splittings, washers, &c. ...	The Micanite & Insulators Co., Ltd., Empire Works, Blackhorse Lane, Walthamstow, E.17.
MICA Block, cut or uncut, gauged to thickness or natural thickness, splittings, washers, &c.	L. Vandervelde, 35, Minories, E.C.3.
MICANITE Insulating sheet, tubes, washers, &c.	The Micanite & Insulators Co., Ltd., Empire Works, Blackhorse Lane, Walthamstow, E.17.
MICROFU Small value fuse for low currents ...	Telegraph Condenser Co., Ltd., Wales Farm Rd., North Acton, W.3.
MIDGET MASTA Fuse switch	Berry's Electric (1928), Ltd., 85-86, Newman St., Oxford St., W.1.
MILL Circuit breakers	Geo. Ellison, Ltd., Perry Barr, Birmingham.
MINIMAX Bakelite 2, 3 and 4 pin side-entry cord-grip plugs	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
MODINE Copper radiation cabinet, blast and concealed heaters	S. G. Leach & Co., Ltd., 26-30, Artillery Lane, E.1.
MOONSTONE Glassware	Underwood (Manchester), Ltd., 1, Dickinson St., Manchester.
MOPUMP Pump and motor designed as a unit	Rhodes, Brydon & Youatt, Ltd., Waterloo Rd., Stockport.
MORGANITE Brushes	The Morgan Crucible Co., Ltd., Battersea Works, Church Rd., S.W.11.
MORGANITE Electric radiators	The Morgan Crucible Co., Ltd., Battersea Works, Church Rd., S.W.11.
MORTISE Single-way small narrow-panel tumbler switches	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
MOULDENSITE Moulding powders and impregnating varnishes	Mouldensite, Ltd., Darley Dale, Derbyshire.
MOULDENSITE Moulding materials	Bakelite, Ltd., 68, Victoria St., S.W.1.

NAME AND DESCRIPTION.	MANUFACTURED BY OR OBTAINABLE FROM
MYCALEX Insulation products	Mycalex (Parent) Co., Ltd., 328, Abbey House, Westminster, S.W.1.
N Insulating tape	St. Helens Cable & Rubber Co., Ltd., Slough.
NALDERS Electrical measuring instruments and relays of all types	Nalder Bros. & Thompson, Ltd., 97a, Dalston Lane, E.8.
N.B.D. Electrical plant	Haslam & Newton, Ltd., Formerly Newton Bros. (Derby), Ltd., Alfreton Rd., Derby.
N.C.S. Electrical measuring instruments and relays of all types	Nalder Bros. & Thompson, Ltd., 97a, Dalston Lane, E.8.
NECO Electric motors ¼ to 1 h.p., a.c. and d.c.	Normand Electrical Co., Ltd., 3, North Side, Clapham Common, S.W.4.
NEOPHONE The new high-efficiency central battery telephone of the micro-telephone pattern, standardised by the British P.O.	Siemens Bros. & Co., Ltd., Woolwich, S.E.18.
NESDRUM W.T. boilers	Richardsons, Westgarth & Co., Ltd., Hartlepool.
NEWBERRY Magicoal fires	Berry's Electric (1928), Ltd., 85-86, Newman St., Oxford St., W.1.
NEWBRIDGE Time switches	Horstmann Gear Co., Ltd., Newbridge Works, Bath.
NEWTONS OF TAUNTON A.c. and d.c. dynamos and motors, l.t. switchgear, &c.	Newtons of Taunton, 6, Grape St., W.C.2.
NICHRO Electric domestic irons	Cranmer & Cheshire, 9, Steward St., Spring Hill, Birmingham.
NICO Fittings, glassware and accessories ...	Nico Light Co., Ltd., 19, Farringdon Avenue, E.C.
NIPHAN Couplings and plugs for cables ...	Simmonds & Stokes, Ltd., 4, Vernon Place, Southampton Row, W.C.1.
NO-LAG Induction motors	British Thomson-Houston Co., Ltd., Rugby.
NOMAG Non-magnetic iron	Ferranti, Ltd., Hollinwood, Lancashire & Bush House, W.C.2.
NOMET Special wiring system and fittings ...	W. T. Henley's Telegraph Works Co., Ltd., Holborn Viaduct, E.C.1.
NOVEL Switch, 5-amp. tumbler type, fitted with extra terminal for looping	W. T. Henley's Telegraph Works Co., Ltd., Holborn Viaduct, E.C.1.
NOX Electric lamps and glass bulbs, tubing and rod	The Nox Electric Lamp Co., Ltd., Hunslet Rd. Works, Hunslet, Leeds.
OASIS Accumulator acid, acid-resisting paints, battery testers	General Chemical & Pharmaceutical Co., Ltd., Willesden, N.W.10.
OHMALINE Insulating varnish	Griffiths Bros. & Co., London, Ltd., Macks Rd., S.E.16.
OHMER Insulating testing sets	Nalder Bros. & Thompson, Ltd., 97a, Dalston Lane, E.8.
OKONITE Insulating tape	William Geipel, Ltd., Vulcan Works, 156-170, Bermondsey St., S.E.1.
OLONITE Cable insulation and protection ...	The Croydon Cable Works, Ltd., formerly known as The Greenwich Cable Works, Ltd., Mitcham Rd., Croydon.
OMEGA Vacuum electric lamps of all kinds	Omega Lampworks, Ltd., Rodney Place, Merton Abbey, S.W.19.
ORB Switchgear, ironclad	Geo. M'Cartney & Co., Burnside Works, Cumnock, N.B.
ORBIT Traversing desk bracket or cabin fan for commercial or marine use	Veritys, Ltd., Plume Works, Aston, Birmingham.
OSRAM Various types of valves for reception and transmission, bright and dull emitter for both general and special purposes	M.O. Valve Co., Ltd., Osram Works, Brook Green, Hammersmith.
OSRAM Electric lamps for all conditions of lighting	The General Electric Co., Ltd., Magnet House, Kingsway, London, W.C.2.
OSRAM Wirless valves of all types for general and special requirements	The General Electric Co., Ltd., Magnet House, Kingsway, London, W.C.2.
OWL Porcelain	Geo. Wade & Son, Ltd., Manchester Pottery, High St., Burslem, Staffs.

NAME AND DESCRIPTION.	MANUFACTURED BY OR OBTAINABLE FROM
OZONAIR Ozone apparatus, pure air ventilation	Ozonair, Ltd., 96, Victoria St., S.W.1.
P. & G. Accumulators	Pritchett & Gold & E.P.S. Co., Ltd., 50, Grosvenor Gardens, S.W.1.
P. & R. Accumulators	Peto & Radford, Props.: Pritchett & Gold & E.P.S. Co., Ltd., 50, Grosvenor Gardens, S.W.1.
PAKYDERM Finishing varnish	Griffiths Bros. & Co., London, Ltd., Macks Rd., S.E.16.
PAXOLIN Bakelite varnish-paper boards, tubes, cylinders	The Micanite & Insulators Co., Ltd., Empire Works, Blackhorse Lane, Walthamstow, E.17.
PAXOLIN Transformer and switchgear bushings, insulators, &c.	The Micanite & Insulators Co., Ltd., Empire Works, Blackhorse Lane, Walthamstow, E.17.
PEERLESS Insulator and fibre	Attwater & Sons, Hopwood Street Mills, Preston.
PEERLESS Single-phase repulsion induction motors, generators and fans	S. G. Leach & Co., Ltd., 26-30, Artillery Lane, E.1.
PEERLESS Insulation paper	J. Burns, Ltd., Wangye Works, Chadwell Heath, Essex.
PEERLESS Insulation	The Micanite & Insulators Co., Ltd., Empire Works, Blackhorse Lane, Walthamstow, E.17.
PELAPONE Country-house electric lighting plants	New Pelapone Engine Co., Ltd., 45, Baker St., W.
PERCO-WASH Electric clothes-washing device and washboiler	The Jackson Electric Stove Co., Ltd., 143, Sloane St., S.W.1.
PERNAX Cable insulation, bird guards ...	The Croydon Cable Works, Ltd., formerly known as The Greenwich Cable Works, Ltd., Mitcham Rd., Croydon.
PERTINAX Special bakelite board, tubes and rods	Geo. L. Scott & Co., Ltd., 60-66, Rochester Row, S.W.1.
PETROLEX Fire extinguishers for electrical equipment	Read & Campbell, Ltd., 75, Victoria St., Westminster, S.W.1.
PHENOLITE Laminated bakelite	J. Burns, Ltd., Wangye Works, Chadwell Heath, Essex.
PHILILITE Totally enclosed diffusing units ...	Philips Lamps, Ltd., 145, Charing Cross Rd., W.C.2.
PHILILUX Enclosed diffusing units	Philips Lamps, Ltd., Philips House, 145, Charing Cross Rd., W.C.2.
PHILIPS Wireless and lamps	Philips Lamps, Ltd., Philips House, 145, Charing Cross Rd., W.C.2.
PHILIRAY Shop window reflectors	Philips Lamps, Ltd., 145, Charing Cross Rd., W.C.2.
PHILUMA Local lighting industrial units ...	Philips Lamps, Ltd., 145, Charing Cross Rd., W.C.2.
PHLATTA Switches	The Edison Swan Electric Co., Ltd., 123-5, Queen Victoria St., E.C.4.
PHONOPHORE Telephones for superimposing on telegraph lines	Sterling Telephone & Elec. Co., Ltd., London.
PIONEER Turn-type switches and switch plugs	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
PIRELLI-GENERAL Wires, cables and flexibles	The General Electric Co., Ltd., Magnet House, Kingsway, London, W.C.2.
PIVOT Single and two-way tumbler switches	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
PIVOT COMBINATION Two-pin tumbler switch plug ...	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
PIVOT INTERMEDIATE Tumbler switches for control of lamps from more than two positions	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
PIXY Bell pushes with straight-line movement	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
PNEUCONEX Grit catchers	Pneumatic Conveyance & Extraction (1929), Ltd., Broadway Buildings, Broadway, S.W.1.
PNEUCONEX Pneumatic coal, ash, and grain handling plants	Pneumatic Conveyance & Extraction (1929), Ltd., Broadway Buildings, Broadway, S.W.1.
PNEUCONEX Pneumatic flue dust extraction equipment	Pneumatic Conveyance & Extraction (1929), Ltd., Broadway Buildings, Broadway, S.W.1.

NAME AND DESCRIPTION.	MANUFACTURED BY OR OBTAINABLE FROM
POINTOLITE Lamps	Edison Swan Electric Co., Ltd., 123-5, Queen Victoria St., E.C.4.
PREMIER Electric fires	Premier Electric Heaters, Ltd., Keeley St., and St. Andrew's Rd., Birmingham.
PREMIER Accumulators	Premier Accumulator Co. (1921), Ltd., Cattle Market Rd., Northampton.
PREMIER DUPLEX Electric vacuum cleaner	Hotpoint Electrical Appliance Co., Ltd., 24, Newman St., Oxford St., W.1.
PREMIER JUNIOR Electric vacuum cleaner	Hotpoint Electrical Appliance Co., Ltd., 24, Newman St., W.1.
PRESCOT Box compounds	British Insulated Cables, Ltd., Prescot, Lancs.
PRESCOT Feeder pillars	British Insulated Cables, Ltd., Prescot, Lancs.
PRESCOT Joint boxes	British Insulated Cables, Ltd., Prescot, Lancs.
PRESCOT Overhead equipment for electric railways and tramways	British Insulated Cables, Ltd., Prescot, Lancs.
PRESCOT Paper insulated cables	British Insulated Cables, Ltd., Prescot, Lancs.
PRESCOT Cotton-covered wires	British Insulated Cables, Ltd., Prescot, Lancs.
PRESSPAHN Insulating board in all thicknesses	The Micanite & Insulators Co., Ltd., Empire Works, Blackhorse Lane, Walthamstow, E.17.
PRESTO Single and two-way quick make and break bakelite pendant switches	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
PRISMAT Directional bulkhead fitting	The Wardle Engg. Co., Ltd., Elsinore Rd., Old Trafford, Manchester.
PRISMATIC Bulkhead fitting	Berry's Electric (1928), Ltd., 85-86, Newman St., Oxford St., W.1.
PROCELL (Regd.) Corrosion-proof rubber insulated cable	Mersey Cable Works, Ltd., Linacre Lane, Bootle, Liverpool.
PROMETHEUS Electric irons, radiators, water heaters, &c.	Dowsing Radiant Heat Co., Ltd., Bollo Lane, Acton, W.3, and 91-3, Baker St., W.1.
PUL-SYN-ETIC Electric impulse clocks and time discipline apparatus	Gent & Co., Ltd., Faraday Works, Leicester.
QUADRO Four-pin plug connector (three pins and "earth")	A. P. Lundberg & Sons, Ltd., 477-479, Liverpool Road, N.7.
QUASI-ARC Electric welding plants and electrodes	Quasi Arc Co., Ltd., 15, Grosvenor Gardens, S.W.1.
QUEAD Electric fires and cookers	William Geipel, Ltd., Vulcan Works, 156-170, Bermondsey St., S.E.1.
QUICKWAY Armature and stator coil-winding and forming machinery	Midland Dynamo Co., Ltd., 64, Belgrave Gate, Leicester.
RADIODESCENT Appliances for radiant heat treatment	Dowsing Radiant Heat Co., Ltd., Bollo Lane, Acton, W.3, and 91-3, Baker St., W.1.
RADIOMATIC Broadcast receivers, band repeater apparatus	Gent & Co., Ltd., Faraday Works, Leicester.
RADION Insulating material	American Hard Rubber Co. (Britain), Ltd., 13a, Fore St., E.C.2.
RAPPER Percussive hand-drill for wall plugs	Wm. Geipel, Ltd., Vulcan Works, 156-170, Bermondsey St., S.E.1.
RECORD Insulation testers, battery cut-outs, circuit breakers	Record Electrical Co., Ltd., Broadheath, Altrincham, Cheshire.
REESILEO Oils, insulating and lubricating ...	Reesoils, Ltd., 1, Eldon Sq., Newcastle-on-Tyne.
REFLEX Control of pendulums of existing workmen's recorders and other pendulums	Gent & Co., Ltd., Faraday Works, Leicester.
REGAL Ebonite	Spicers, Ltd., 19, New Bridge St., E.C.4.
REGENTONE Wireless high tension units and trickle chargers for direct connection to the electric supply	W. E. Beardsall & Co., Ltd., 5, Victoria Bridge, Manchester.

NAME AND DESCRIPTION.	MANUFACTURED BY OR OBTAINABLE FROM
RELAY Automatic telephone and calling installations and fire alarms	Relay Automatic Telephone Co., Ltd., Marconi House, Strand, W.C.2.
RELIANCE Circuit breakers	Whipp & Bourne, Ltd., Castleton, Manchester.
REPELLITE Insulating sheets	Spicers, Ltd., 19, New Bridge St., E.C.4.
RESILIA Pyrometers, electrical high precision instruments, miniature electrical instruments	Foster Instrument Co., Letchworth, Herts.
RESISTON Insulating material	American Hard Rubber Co. (Britain), Ltd., 13a, Fore St., E.C.2.
REVERSING Tumbler switch, with or without "off" position	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
REVO Fires & domestic apparatus, cookers, street lighting, and industrial fittings	The Revo Electric Co., Ltd., Britannia Works, Tividale, Tipton, Staffs.
REVO Irons, switchgear and fans	The Revo Electric Co., Ltd., Britannia Works, Tividale, Tipton, Staffs.
REX A.c. meters	Thompson & Co., 1 & 3, Old Swan Lane, E.C.4.
RHECO Switchboards, industrial fittings ...	Robinson & Hands Electric Co., Ltd., Barwick St., Birmingham.
RINGSDORFF Carbon brushes, brush holders and controller fingers	Ringsdorff Carbons (England), Ltd., Colindale Avenue, Hendon, N.W.9.
ROYAL EDISWAN Lamps	Edison Swan Electric Co., Ltd., 123-5, Queen Victoria St., E.C.4.
RUPTOR Ironclad switch	W. T. Henley's Telegraph Works Co., Ltd., Holborn Viaduct E.C.1.
SADIA Automatic water heater, enclosed fast boiling plates, automatic time switches	Sadia, Ltd., 22, Newman St., W.1.
SAFETEE Ironclad switchgear	L. Weekes (Luton), Ltd., Luton, Beds.
SAFUSE Fuses and combined switch fuse and interlocked switch plugs	Donovan & Co., 47, Cornwall St., Birmingham.
ST. HELENS Cab tire sheathed wires and cables of all types, dialite cables	St. Helens Cable & Rubber Co., Ltd., Slough.
ST. HELENS Ebonite, corrosion-proof fittings ...	St. Helens Cable & Rubber Co., Ltd., Slough.
ST. HELENS Insulating matting, insulating gloves, insulating shoes, insulating tapes	St. Helens Cable & Rubber Co., Ltd., Slough.
SALFORD Circuit breakers	General Electric Co., Ltd., Magnet House, Kingsway, London, W.C.2.
SANGAMO-EDISWAN Meters	Edison Swan Electric Co., Ltd., 123-5, Queen Victoria St., E.C.4.
SATCHWELL Thermostats	The Rheostatic Co., Ltd., Mackenzie Street, Slough, Bucks.
SAUTER Time switches and thermostats ...	Nathan & Allen, Ltd., 25, Victoria St., London, S.W.1.
S & C Turned and Screwed Repetition Parts from Bar in Brass and Steel, Capstan and Auto Eroductions and Pressings from Sheet	Spears & Company, Capstan Repetition Works, 68, Park Rd, Hockley, Birmingham.
SECTOR Electric irons, fires, accessories ...	Electrical Components, Ltd., 88-90, Gt. Charles St., Birmingham.
SEECOL Modern stage lighting equipment ...	Strand Elec. & Eng. Co., Ltd., 24, Floral St., W.C.2.
SEELCO Wiring system comprising lead-alloy sheathed wires and simple accessories	Siemens Elec. Lamps & Supplies, Ltd., 38 & 39, Upper Thames St., E.C.4.
SELCO Syrens, motors, fans	S. G. Leach & Co., Ltd., 26-30, Artillery Lane, E.1.
SEMAPHITE Cables	Johnson & Phillips, Ltd., Charlton, S.E.
SEMOCO Portable and sandproof lighting sets, generators and motors for aeroplanes, wireless and cinematograph services	Small Electric Motors, Ltd., Eagle Works, Church Fields Rd., Beckenham, Kent.

NAME AND DESCRIPTION.	MANUFACTURED BY OR OBTAINABLE FROM
SERIES-PARALLEL Tumbler switch with or without "off" position	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
SERVICE Grid resistances and accessories ...	The Rheostatic Co., Ltd., Mackenzie St., Slough.
SHAKEPROOF Lock washers, locking terminals for vibration proof connections	Barber & Colman, Ltd., Marsland Rd., Brooklands, near Manchester.
SHAYDOLITE Lamp lacquer	Griffiths Bros. & Co., London, Ltd., Macks Rd., S.E.16.
SHIPTON Automatic telephone systems ...	Shipton Automatic Telephone System, Ltd., Caxton House, Tothill St., S.W.1.
SIEMENS Electric lamps	Siemens Elec. Lamps & Supplies, Ltd., 38 & 39, Upper Thames St., E.C.4.
SIEMENS Electric pyrometers and distance thermometers	Elliott Bros. (London), Ltd., Century Works, Lewisham, S.E.13.
SIEMENS Batteries—fluid and dry	Siemens Bros. & Co., Ltd., Woolwich, S.E.18.
SIEMENS Ebonite	Siemens Bros. & Co., Ltd., Woolwich, S.E.18.
SIEMENS Joint boxes, feeder pillars, house service fuse boxes	Siemens Bros. & Co., Ltd., Woolwich, S.E.18.
SIEMENS Electric cables and wires of all types	Siemens Bros. & Co., Ltd., Woolwich, S.E.18.
SIFAM Electrical and radio measuring instruments and instrument transformers	Sifam Electric Instrument Co., Ltd., Bush House, Aldwych, W.C.2.
SILUMINITE Insulating and arc-resisting mouldings	Turner's Asbestos Cement, Ltd., Trafford Park, Manchester.
SILVALUX Electric lamps (opal)	Siemens Elec. Lamps & Supplies, Ltd., 38 & 39, Upper Thames St., E.C.4.
SILVARAY One-piece glassware fittings	Siemens Elec. Lamps & Supplies, Ltd., 38 & 39, Upper Thames St., E.C.4.
SILVEROID Corrosion-resisting nickel-copper alloy, silvery-white for electrical fittings, &c.	Henry Wiggin & Co., Ltd., Wiggin St., Birmingham.
SILVERSTONE Decorative glassware, shades, bowls and enclosed lighting units	Metropolitan-Vickers Electrical Co., Ltd., Trafford Park, Manchester.
SILVERTOWN Cables, instruments, &c.	India Rubber, Gutta Percha & Telegraph Works Co., Ltd., 106, Cannon St., E.C.4.
SIMPLEX Conduits and all electric installation equipment	Simplex Conduits, Ltd., Garrison Lane, Birmingham.
SIMPLEX "Ordinary" and "Reverse" door contacts	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
SINDANYO Insulating and arc-resisting boards ...	Turner's Asbestos Cement, Ltd. Trafford Park, Manchester.
SIROCCO Fans	Davidson & Co., Ltd., Sirocco Eng. Works, Belfast, Ireland.
SISSON Enclosed self-lubricating and open-type steam engines, steam-driven dynamos complete	W. Sisson & Co., Ltd., Elmbridge Rd., Gloucester.
SISTOFLEX Insulating sleeving, fibre and leatheroid	Spicers, Ltd., 19, New Bridge St., E.C.4.
SISTOFLEX Varnished cloth, paper, tapes, &c. ...	Spicers, Ltd., 19, New Bridge St., E.C.4.
SLOTTED STEEL For adjustable switchgear, frames, shelving, racks, &c.	Constructors, Ltd., Nickel Works, Tyburn Rd., Erdington, Birmingham.
SMOOTHWELL Electric irons	Premier Electric Heaters, Ltd., Keeley St. and St. Andrew's Road, Birmingham.
SOLARIUM Electric sun baths	Dowsing Radiant Heat Co., Ltd., Bollo Lane, Acton, W.3, and 91-3, Baker St., W.1.
SOLBIT Solid bitumen mining cables ...	W. T. Glover & Co., Ltd., Trafford Park, Manchester.
SOLINK Isolating links	Donovan & Co., 47, Cornwall St., Birmingham.
SOTONITE Insulated cables	Pirelli-General Cable Works, Ltd., Southampton & Eastleigh.
S_P High- and low-tension insulators for transmission lines, insulators for switchgear, transformer bushings, &c.	Steatite & Porcelain Products, Ltd., Stourport, Worcs.

NAME AND DESCRIPTION.	MANUFACTURED BY OR OBTAINABLE FROM
SPECIAL LOHYS Electrical sheets and stampings ...	Joseph Sankey & Sons, Ltd., Bilston, Staffs.
SPEEDFIX Patent self-centering terminals ...	The General Accessories Co., Ltd., 18-22, Euston Buildings, George St., N.W.1.
SPENCER-BONECOURT Waste Heat Boilers, Economisers, Kirke Patent Boilers, &c.	Spencer-Bonecourt, Ltd., Broadway Buildings, S.W.1.
STALLOY Transformer sheets and stampings. Telephone and loud-speaker diaphragms	Joseph Sankey & Sons, Ltd., Bilston, Staffs.
STANDARD Cables of all types	Standard Telephones & Cables, Ltd., Columbia House, Aldwych, W.C.2.
STANDARD Public address systems	Standard Telephones & Cables, Ltd., Columbia House, Aldwych, W.C.2.
STANDARD Telephones for all purposes, manual and automatic	Standard Telephones & Cables, Ltd., Columbia House, Aldwych, W.C.2.
STANDARD Traffic control system	Standard Telephones & Cables, Ltd., Columbia House, Aldwych, W.C.2.
STANDARD Wireless transmitting and receiving apparatus	Standard Telephones & Cables, Ltd., Columbia House, Aldwych, W.C.2.
STANNOS WIRING SYSTEM V.I.R. wires protected by a water-tight tinned copper sheathing suitable for concentric or two-wire installation	Siemens Bros. & Co., Ltd., Woolwich, S.E.18.
STEATAIN High- and low-tension insulators for transmission lines, insulators for switchgear, transformer bushings, &c.	Steatite & Porcelain Products, Ltd., Stourport, Worcs.
STELLA Electric lamps	Stella Lamp Co., Ltd., Winchelsea Road, Harlesden, N.W.
STERLING Insulating varnishes, solid impregnating compounds, wire enamels	The Sterling Varnish Co., Fraser Rd., Trafford Park, Manchester.
STERLING Telephone systems and signalling equipment	Sterling Telephone & Elec. Co., Ltd., London.
STRAIGHT-LITE Reflector fittings for shop windows, cornice and picture lighting, straight-lite tubular signs	Straight-Lite Reflectors, Ltd., Oxford House, 9-15, Oxford St., W.1.
STROWGER Public automatic telephones and exchange equipment, private automatic exchanges	Automatic Telephone Manufacturing Co., Ltd., Strowger Works, Milton Road, Edge Lane, Liverpool.
SUDDEUTSCHE Cable and flexible	"Z" Electric Lamp & Supplies Co., Ltd., 73, Newman St., W.1.
SUNBEAM Magicoal fire	Berry's Electric (1928), Ltd., 85-86, Newman St., Oxford St., W.1.
SUNBERRY Magicoal electric fire	Berry's Electric, Ltd., 85-6, Newman St., Oxford St., W.1.
SUNDOWN Magicoal electric fire	Berry's Electric, Ltd., 85-6, Newman St., Oxford St., W.1.
SUNRAY Tricity radiators	British Electric Transformer Co., Ltd. (Sunray Tricity Dept.), Wellington House, 125-130, Strand, W.C.2.
SUPACON Electric cables	Superlamp, Ltd., 92-4, Paul St., E.C.2.
SUPASTONE Illuminating lighting glassware ...	Wholesale Fittings Co., Ltd., 23-27, Commercial St., E.1.
SUPAUL Electric cables, electrical accessories, electric signs	Superlamp, Ltd., 92-94, Paul St., E.C.2.
SUPER-BOX House-wiring joint box	W. T. Henley's Telegraph Works Co., Ltd., Holborn Viaduct, E.C.1.
SUPERLUX Glassware	The General Electric Co., Ltd., Magnet House, Kingsway, W.C.2.
SUPERSCALE Indicating instruments	Everett, Edgecumbe & Co., Colindale Works, Hendon, N.W.9.
SUPER SEASONED Vulcanised fibre	J. Burns, Ltd., Wangye Works, Chadwell Heath, Essex.
SUPRONIC Cupro nickel high resistance wire ...	L.P.S. Electrical Co., Ltd., Ealing Rd., Alperton, Middlesex.
SWAN BRAND Electric cooking utensils, sterilisers, and pedestal heaters	Mayall & Co., Ltd., 61, Moor St., Birmingham.

NAME AND DESCRIPTION.	MANUFACTURED BY OR OBTAINABLE FROM
SWANLITE Unit lighting fittings	The Edison Swan Electric Co., Ltd., 123-5, Queen Victoria St., E.C.4.
SYNCHRONOME Electric clocks	Synchronome Co., Ltd., 32-4, Clerkenwell Rd., E.C.1.
TANGENT Sound signals, ironcased and wood-cased, and RADIO apparatus	Gent & Co., Ltd., Faraday Works, Leicester.
TATE Electric stop motion (safety device for engines)	James Tate & Co., Victory Works, Bradford.
TAYLOR-SCOTSON Voltage regulator	Cox-Walker & Partners, Darlington.
T.C.C. Mansbridge and paper condensers, mica condensers, power factor improvement condensers	Telegraph Condenser Co., Ltd., Wales Farm Rd., North Acton, W.3.
TELAC Tumbler switches, accessories, switchgear, ironclad gear	J. H. Tucker & Co., Ltd., King's Rd., Tyseley, Birmingham
TELENDURON Insulators for telegraph and telephone lines, also insulation mouldings for electrical trade	Thos. De la Rue & Co., Ltd., Shernhall St., Walthamstow, E.17.
TENBY Junction boxes, clips, saddles, &c. ...	S. O. Bowker, 37, Tenby St., Birmingham.
TERRA-GRIP Continuity wiring system	Simplex Conduits, Ltd., Garrison Lane, Birmingham.
TERRAPIN (Regd.) Two-pin and "earth" plug connectors	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
TEST SHEATH Test conductor for underground electric cables	W. T. Glover & Co., Ltd., Trafford Park, Manchester.
THERMOID Flexible cord	W. T. Henley's Telegraph Works Co., Ltd., Holborn Viaduct, E.C.1.
THISTLE Conduit tubes and fittings	James McDougall Ltd., Wednesbury, Staffs.
THISTLE Galvanised span and guard wire strand to M.T.A. specification	Frederick Smith & Co. Wire Manufacturers, Ltd., Halifax.
THISTLE Tinned steel armature binding wire	Frederick Smith & Co. Wire Manufacturers, Ltd., Halifax.
THOR Washers and ironers	Edison Swan Electric Co., Ltd., 123-5, Queen Victoria St., E.C.4
THOR Vacuum cleaners	Edison Swan Electric Co., Ltd., 123-5, Queen Victoria St., E.C.4
THOR Juvenators	Edison Swan Electric Co., Ltd., 123-5, Queen Victoria St., E.C.4
THREE STAR Accumulators	Three Star Accumulators, Ltd., Rosebery Avenue, N.17.
TIRRILL Automatic voltage regulators ...	British Thomson-Houston Co., Ltd., Rugby.
TITAN B.E.S.A. Standard 30 amps. two-pin plug connector	A. P. Lundberg & Sons, Ltd., 477-479, Liverpool Road, N.7.
TREVA Electrical accessories	Trevelyans (B'ham), Ltd., 135, Bracebridge St., Birmingham.
TRICITY Cookers	British Electric Transformer Co., Ltd., Hayes, Middlesex.
TRICITY Cookers and tableware	British Electric Transformer Co., Ltd. (Sunray Tricity Dept.), Wellington House, 125-130, Strand, W.C.2.
TRIPIN (Regd.) Three-pin plug connector (all current-carrying pins)	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
TRIPOLIT Triple pole tumbler switch, positive quick make and break	A. P. Lundberg & Sons, Ltd., Pioneer Electrical Works, Paradise Passage, Sheringham Rd., N.7.
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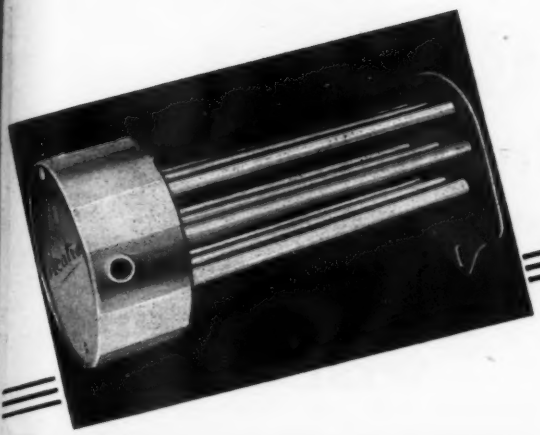

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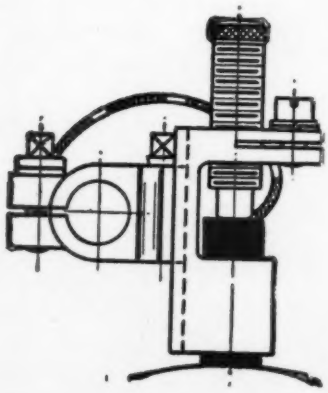

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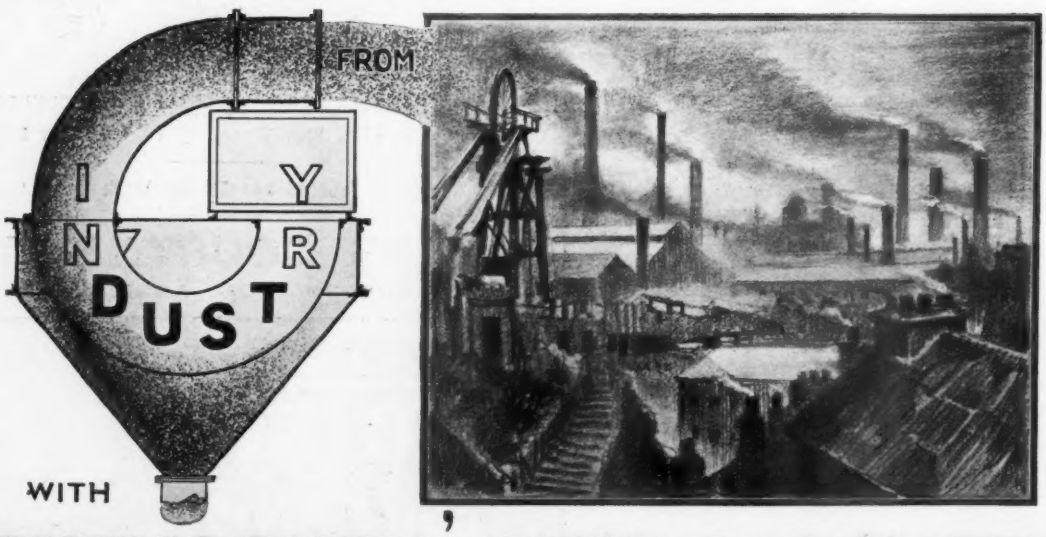

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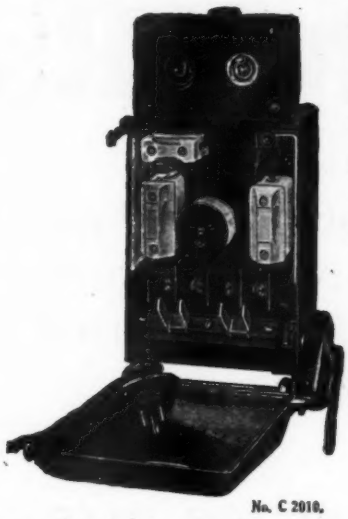

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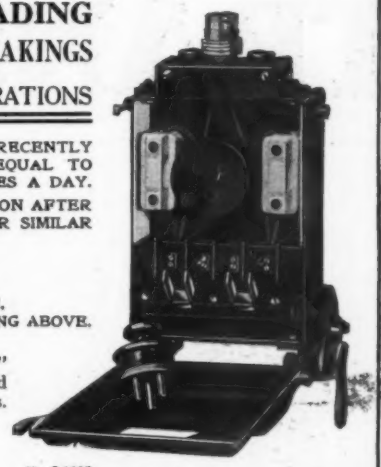

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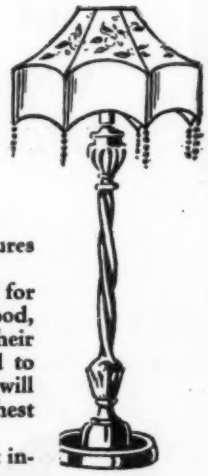

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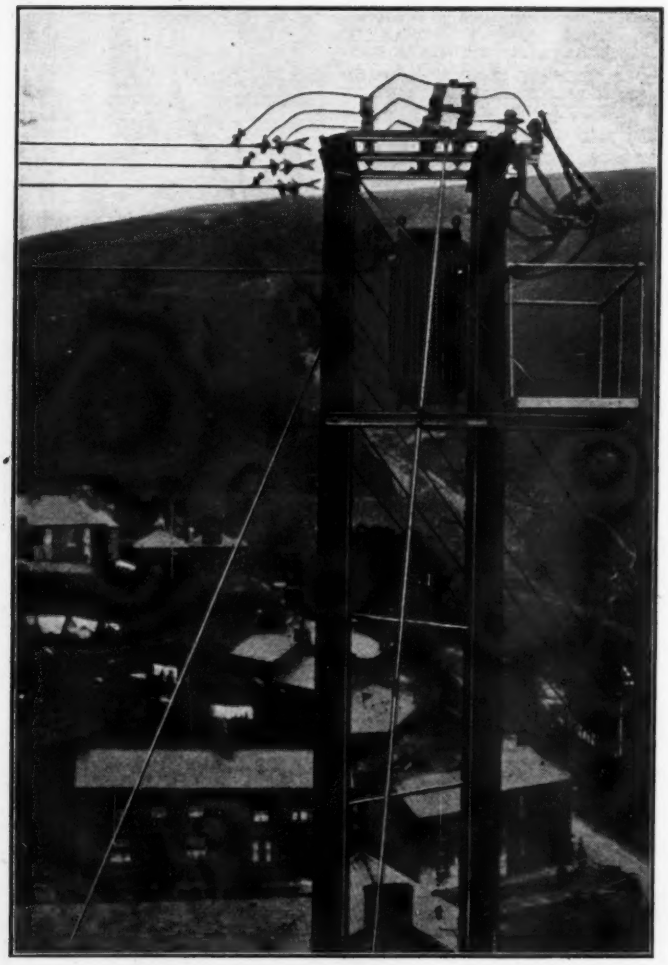

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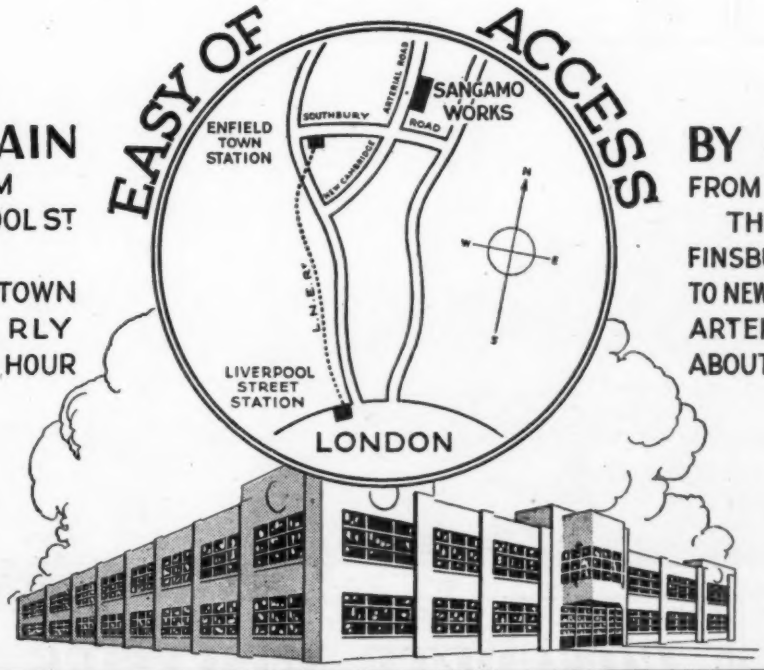

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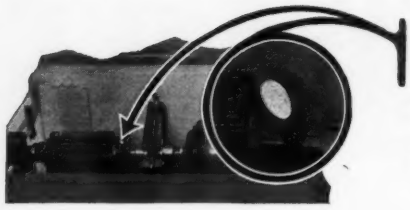
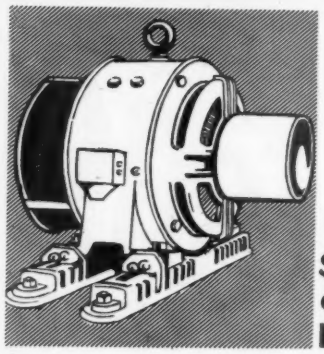


A florin can be balanced on edge on the winding engine, and will remain in position all the time the lift is running.

The Steadiness of Efficiency

MARRYAT & SCOTT, LTD.,
40 & 57a, HATTON GARDEN, E.C.

Tele: Holborn 5686. *Telegrams: "Marryat, London."*



STURDY and RELIABLE

MOTORS

"CYCLONE" Motors are strong and dependable, built to maintain their efficiency under the most arduous conditions of use.

"Cyclone" Motors are tested motors; a six-hour test on full load. Tested and, moreover, *passed* as complying with B.S.S. 168/1926.

One-Sixteenth to FIFTY B.H.P.

"Cyclone" sizes cover all smaller industrial D.C. needs, for individual or group driving, in enclosed ventilated and totally enclosed types.

Write for our Booklet 461J.

MATTHEWS & YATES LTD
SWINTON MANCHESTER

No. 2 of a series of advertisements showing stocks of Cable Covers.

CABLE COVERS

The illustration shows a view of North Yard with over 100,000 Standard Covers.

Stock Sizes:

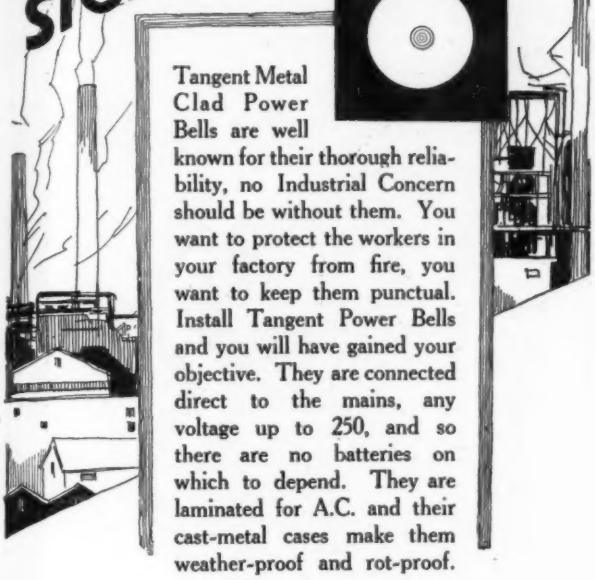
4½"	x 2"	x 3'	long.
6"	x 2"	x 3'	,,
7"	x 2"	x 3'	,,
9"	x 2"	x 3'	,,
12"	x 2"	x 3'	,,
13"	x 2"	x 3'	,,
9"	Peaked Covers.		
10"	,,	,,	
11"	,,	,,	

Send us your Enquiries.

CONCRETE UTILITIES LTD.,
Great Amwell . . . Ware, Herts.

'Phone: Ware 84.

SOUND SIGNALS



Tangent Metal Clad Power Bells are well known for their thorough reliability, no Industrial Concern should be without them. You want to protect the workers in your factory from fire, you want to keep them punctual. Install Tangent Power Bells and you will have gained your objective. They are connected direct to the mains, any voltage up to 250, and so there are no batteries on which to depend. They are laminated for A.C. and their cast-metal cases make them weather-proof and rot-proof.

Gents' Products are entirely British.

LONDON: 25, Victoria St., S.W.1.

SYDNEY: W. G. Watson & Co., Ltd.

GENT & Co LTD
Established 1872

NEWCASTLE-ON-TYNE: Tangent House, Blackett St.

FARADAY WORKS, LEICESTER.

Drill Electrically

With
Little Giant
Portable
Electric Drills

FOR drilling holes in metal or wood, the "Little Giant" meets the demand for Portable Electric Drills that give rapid work in comparatively unskilled hands.

OUTSTANDING FEATURES:

- Ease of Manipulation.
- Conveniently placed Trigger Switch.
- Light Weight.
- High Drilling Speed.
- Ball Bearings throughout.
- Air-Cooled Motor.

Write for Catalogue No. 15, giving full particulars of our "Little Giant" Machines.

The
Consolidated Pneumatic Tool Co.,
Limited,
Egyptian House, Piccadilly, London, W.1.
Main Works: Fraserburgh, Scotland.
Branches all over the world.

72,000,000 SCREWS ALWAYS IN STOCK

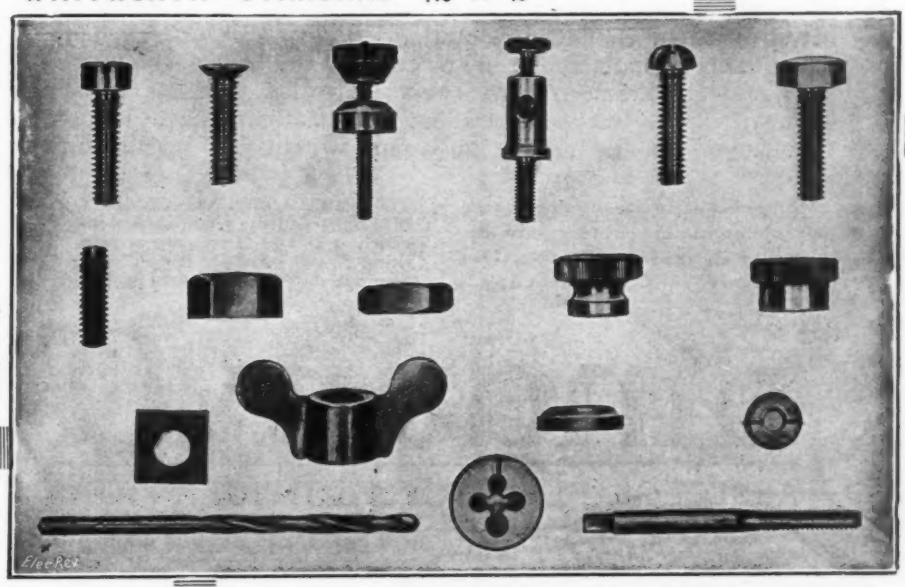
BRITISH ASSOCIATION Nos. 0 to 12.
WHITWORTH STANDARD 1/16" to 3/8"

CHEESE, COUNTERSUNK, ROUND, HEXAGON and GRUB SCREWS

HEXAGON SQUARE, ROUND, KNURLED and WING NUTS.

TERMINALS.

ELECTRICAL and WIRELESS PARTS.



BRASS and STEEL.

CUT THREADS and ROLLED THREADS

SMALL TOOLS, TAPS, DIES, DRILLS, REAMERS.

AUTOMATIC MACHINE WORK UP TO 1" DIA.

85-page Illustrated Catalogue on request.

T. L. CASTLE, 2, Cricklewood Broadway, N.W.2.

Telegrams: "SKRUSADYS, 'PHONE, LONDON." Telephones: HAMPSTEAD 2699 & 7591.

Switchboard embodying Ebony "Sindanyo" Insulating Panels. Reproduced by courtesy of: Metropolitan-Vickers Electrical Co., Ltd.

JUSTIFIABLE PRIDE

The Station Engineer is proud of the attractive appearance of such switchboards as that shown above. ¶ His pride is justified, the more because with Ebony "Sindanyo" for a base, a switchboard is infinitely more resilient than slate, and will so much the better withstand shocks and vibration. ¶ He knows too that, being scientifically manufactured, it is entirely free from conducting veins and other defects. ¶ These and other qualities equally weighty, explain why the leading manufacturers have adopted "Sindanyo" for their more important switchboard installations.

All switchboard manufacturers and station engineers ought to have the latest "Sindanyo" brochure No. 13. May we send you a copy?

TURNERS ASBESTOS CEMENT LIMITED and the Companies with which it is associated, own sixteen works, ten asbestos mines, and employ over fifteen thousand people.

"SindanyO"

REGISTERED

ASBESTOS ELECTRICAL INSULATIONS

DIELECTRIC HOMOGENEOUS - STRONG

S3

TURNERS ASBESTOS CEMENT LTD.

LONDON OFFICE:
Asbestos House, Southwark St., S.E.1

TRAFFORD PARK, MANCHESTER.

BIRMINGHAM OFFICE:
14, New Street.

CONDENSING PLANT AUXILIARIES

STEAM AIR EJECTORS

2 or 3 Stage with Intercoolers in 1 Casing. We were the **first** to introduce Multi-Stage Air Ejectors into Great Britain, thereby revolutionizing Condensing Plant Development—**first then and first now.**

◆

"HIVAC" EXTRACTION PUMPS

Single and 2 Stage, with Pressure Sealed Glands.

◆

FEED WATER HEATERS

High and Low Pressure.

◆

EVAPORATORS

◆

COMPLETE CLOSED FEED SYSTEMS

◆

DE-AERATORS

◆

SELF-CLEANING CIRCULATING WATER-STRAINERS

HICK HARGREAVES & CO. LTD. BOLTON

©

Open it!

Mark how its build and finish impress you from the start.

Examine it closely, see how carefully every detail in design has been thought out.

Compare its price and marvel at its remarkable value.

Make it your standard heavy-duty switch, and realise how truly it has been named.

The
SUPERIOR

Write for Folder 103, it will tell you more!

SANDERS SUPERIOR SWITCHGEAR

is stocked and sold by

ELECTRICAL WHOLESALERS EVERYWHERE

LONDON SHOWROOMS:
78, NEAL ST. (off Shaftesbury Avenue), **LONDON, W.C.2.**

DISTRICT REPRESENTATIVES:
NORRINGTON & LANDON Ltd., 33, Brazennose Street, Manchester.
W. C. YUILLE & Co. Ltd., 155a, St. Vincent Street, Glasgow, C.2.
V. G. BURKITT, 105, Redcliffe Street, Bristol.
L. G. COADE & Co., Winchester House, Victoria Square, Birmingham.

WM. SANDERS & CO. (Sole Proprietor: Wm. Preston), WEDNESBURY, STAFFS.

In either case Sunco solves your problem

The type of cable you use depends upon technical conditions, but whether you specify lead sheath or tough rubber, Sunco can supply it from stock.

Sunco service comes to your aid with everything electrical. From a complete wiring system to a single junction box. Every article supplied is the latest on the market, and was invented to save you time and money.

The Sanco joint box (shown on the left) takes all lead covered cables from Twin 1/·044 to Three-core 3/·036. The box is a white alloy casting and can be used as a one, two, three or four-way box, just as required. The bonding is exceptionally good.

The Wylex Box (shown on the right) can also be used as a one, two, three or four-way pattern. It is made of highly finished bakelite and is designed for use with non-metal covered cables. We shall be glad to send you samples of either pattern.

THE SUN ELECTRICAL Co. Ltd.

118-120, Charing Cross Road, LONDON, W.C.2.

LEEDS:
49-50, Park Place.
Telephone—28511 (2 lines)

Telephone:
Temple Bar 3500 (10 *lines*).
Telegrams:
"Secabilis, Westcent, London."

NEWCASTLE-ON-TYNE:
112, Pilgrim Street.
Telephone—Central 3728.

Immediate Delivery from Stock

Large Stocks always maintained.

ROBERT HORNBY & CO. LTD.

The Original Z Fuse System

7 CARLISLE ST. DEAN ST. LONDON W.1.

Telegrams: "Essesmeter, Westcent London"

Telephones: Regent. 5609 - 5610.

JACKSON
ELECTRIC COOKING CABINETS

THERE IS A DISTINCT DEMAND FOR TABLE COOKERS ARE YOU PREPARED FOR IT?

CATALOGUE No. 46

STANDARD FINISH

£21 : 12 : 6 - LIST

DE LUXE FINISH
(as illustrated)

£23 : 16 : 3 - LIST

SEND FOR A CATALOGUE OF A COMPLETE RANGE OF THE JACKSON BEAUTY SERIES COOKERS.

THE JACKSON ELECTRIC STOVE CO., LTD.
143, SLOANE STREET :: :: :: LONDON, S.W.1.
Telephone: SLOANE 6248 (3 lines). Telegrams: "COOKELEC, PHONE, LONDON." Works: LUTON, BEDS.

VINCENT

IS AS GOOD AS ANY — and better than many

The New 10/15 Amp. VINCENT SWITCH SPLITTER

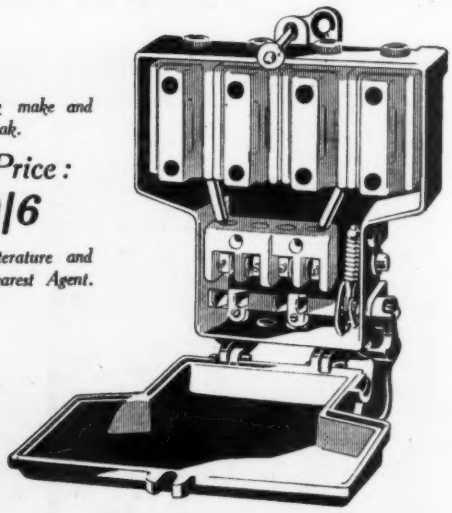
A considerable saving in price is effected on small power and light installations by this latest addition to the Vincent range.

The famous features of the larger model, originally designed for Public Supply Authorities, are embodied in the new design and ensure highest possible satisfaction in service.

Fitted quick make and break.

List Price: **10/6**

Send for literature and name of nearest Agent.



VINCENT

Switchgear Manfg. Co., Ltd.,
SAMPSON ROAD NORTH
BIRMINGHAM.

SWITCH AND FUSEGEAR *ONLY*

W.H.W.

Grey Iron Castings
of every description
. . . . *for* . . . .
Electrical & General Engineers
from 2 oz. to 5 cwt.

* * * * *

. Electrical Resistances. .
. . Motor Castings. . .
. . . Switch Boxes. . . .
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. . . Castings. . . ,
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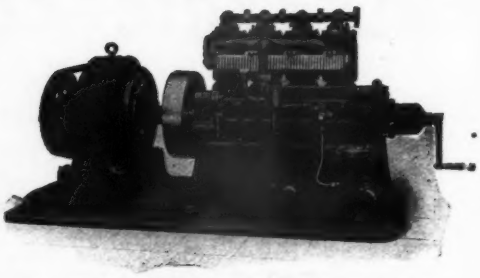
. Repetition Castings. .
Letters for Electric Signs.

* * *

Send us your enquiries. We shall be pleased to make a sample casting from your pattern.

JOHN HARPER
AND COMPANY LIMITED
Established 1790.
Albion Works, Walsall Road,
WILLENHALL,
Staffs.

OIL ENGINES — Pelapone — LIGHTING SETS



10-kW Direct-Coupled Paraffin-Driven Electric Generating Plant.

WHEN 100% absolute reliability is demanded, as in Wireless Stations, Lighthouses, Fire-Pumping Plants, &c., the wise engineer specifies a "Pelapone."

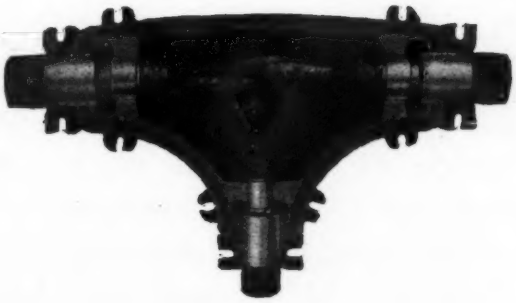
To those discriminating engineers who look first for reliability and quality, the name "Pelapone" brings a feeling of confidence and assurance.

Include a "Pelapone" in your next specification and experience first-hand the satisfaction of a trouble-free equipment.

Ask for a copy of the new Booklet, No. 173.

NEW Pelapone ENGINE Co LTD
45, BAKER ST., LONDON, W.1.
'PHONE WELBECK 2519. TELEGRAMS "NEWPELA".
WORKS - LOFTHOUSE GATE, WAKEFIELD.

the Jointer's Mate



likes these Henley Boxes too. Of course, he's not yet "up to" all the fine points of the jointer's art but he recognises the saving that's effected as a result of standardization. The interchangeability of parts means fewer trips back to the Stores for him and less to cart out on a job, so that he agrees that the jointer talks sense when he says "Give us HENLEY CABLEGRIP SERVICE BOXES."

COMPOUND POCKET TYPE
CABLEGRIP SERVICE BOXES
TRADE MARK

FEATURES

The filling holes provided in the lid of the cast iron box are of ample proportions. They permit a final inspection of the joint before the box is filled with compound and the cover plates are placed in position.

C.36

W.T. HENLEY'S TELEGRAPH WORKS CO. LTD. HOLBORN VIADUCT, E.C.1

CLASS 'F'

in the woodyard.

Here's an unusual job for a motor—driving a portable log crosscutter by Ransomes. An unusual job for an unusual motor, in fact, for the Crompton Class 'F' D.C. Motor has qualities which lift it right out of the ordinary and put it in the forefront of D.C. motors to-day. It is a chip of the old Crompton block—with the chip more efficient, more reliable, stronger mechanically and needing less attention than the block. It is selling in far greater numbers too than the range of good D.C. motors it displaces—and that fact alone, in days when D.C. is dying and in view of the important position we have always held as manufacturers of D.C. plant, is sufficient proof that the Crompton Class "F" Motor is the one for your D.C. applications. Write for Specification A.302 and get details of this outstanding motor.

NO FRIEND to the WOODMERCHANT

No wood is used in the construction of a C.P. Transformer, for insulation or packing or any other purpose. And another thing you will not find is an automatic coil tightening device, because the coils are shrunk during manufacture and assembly, and such a fitting is unnecessary. In many other features the Crompton Parkinson transformer is ahead of current practice, and betters ordinary performance in the really important matter of absolutely reliable service at the highest efficiency consistent with a large safety margin against overloads, transient stresses and other abnormal conditions.

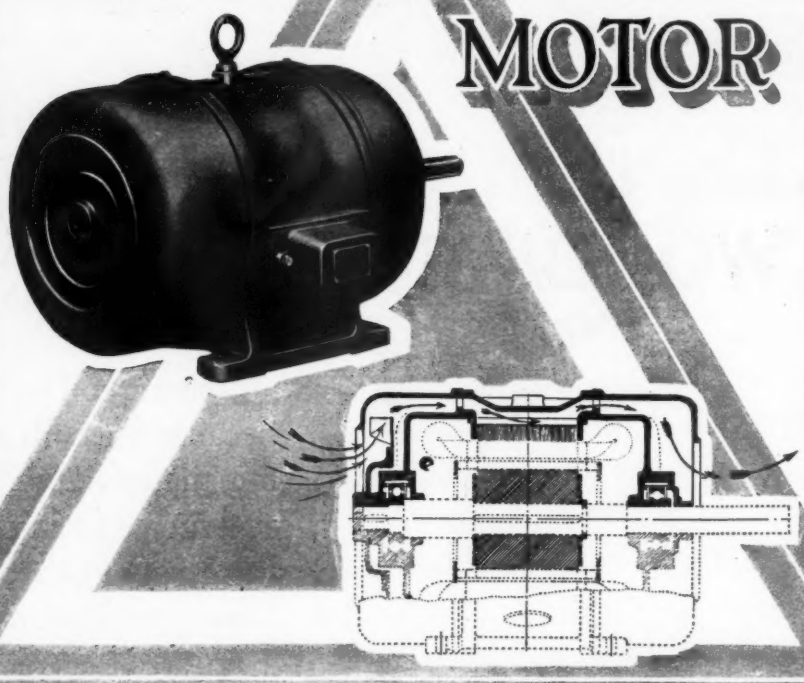
When you install a C.P. transformer you begin to experience absolutely trouble-free transformation. Take the first step now by writing for Specification A.402.

CROMPTON PARKINSON LIMITED

Head Office: Guiseley, Leeds. Works: Guiseley & Chelmsford.

Right in Size and Price

A COMPACT AND LOW-PRICED TOTALLY-ENCLOSED MOTOR



The windings are in a totally enclosed internal shell and are cooled by fan-driven air passing between this and the external shell.

J.H. **HOLMES** & CO LTD

HEAD OFFICE AND WORKS: PORTLAND ROAD

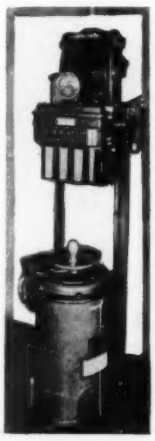
NEWCASTLE-ON-TYNE ENGLAND

IN CANADA

THE illustration shows Allen West control gear in a Canadian pulp mill. Allen West gear was adopted only after the most extensive trials with various makes and types, and was supplied through Allen West (Canada) Ltd., New Birks Building, Montreal, Canada.

All the equipment supplied for standard Squirrel Cage motors was "SM" type iron-clad starters, so constructed as to render them hose-proof.

For motors up to and including 75 H.P., "SM" type oil immersed iron-clad change-over switches were supplied for throwing the motors directly across-the-line.



One of the controls.

Above 75 H.P. "SM" type auto-transformer starters were supplied.

After consideration, "SMT" panels were adopted for the wound rotor motors, comprising stator switch and interlocked liquid rotor starter. A similar arrangement was supplied for all the variable speed wound rotor motors, except that the rotor control consisted of liquid regulators.

On account of the satisfactory service of these liquid starters installed in the paper mills, various consulting engineers have specified liquid control for all wound rotor motors.

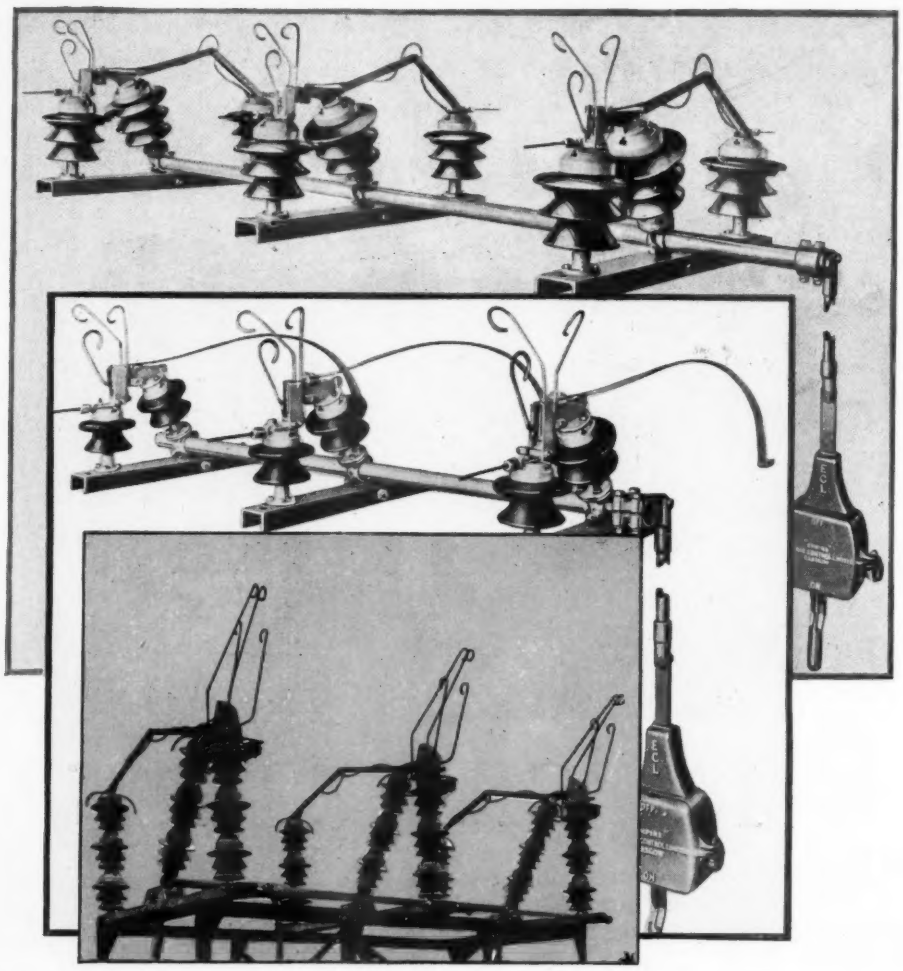
During erection a check was kept on the installation costs, and the engineers report that a saving was made of between 25 and 50% by the installation of Allen West equipment; this comparison being made between ALLEN WEST equipment and the standard equipments as built in Canada by other Companies.

ALLEN WEST

& CO. LTD., BRIGHTON

The largest and best-equipped factory specializing in electric controllers

Raymond



HORIZONTAL DISCONNECTING SWITCHES

THESE disconnecting switches are made in two types, with three and two insulators respectively.

Both are illustrated above, the two-insulator type effects a slight economy by eliminating the third insulator on each phase, the moving insulators being coupled to the line by arched flexible strips secured by gun-metal clamps.

The detail work is of a very high standard, the pivot bearings being of stainless steel in order to obviate possible corrosion; the units are mounted on heavy, rigid, hot galvanised channel steel; the insulators are carried upon forged steel brackets, and all iron and steel parts are hot galvanised; all other metal parts are cadmium plated.

The small illustration shows a three-insulator switch (66,000 volts, 400 amps.).

ELECTRIC CONTROL

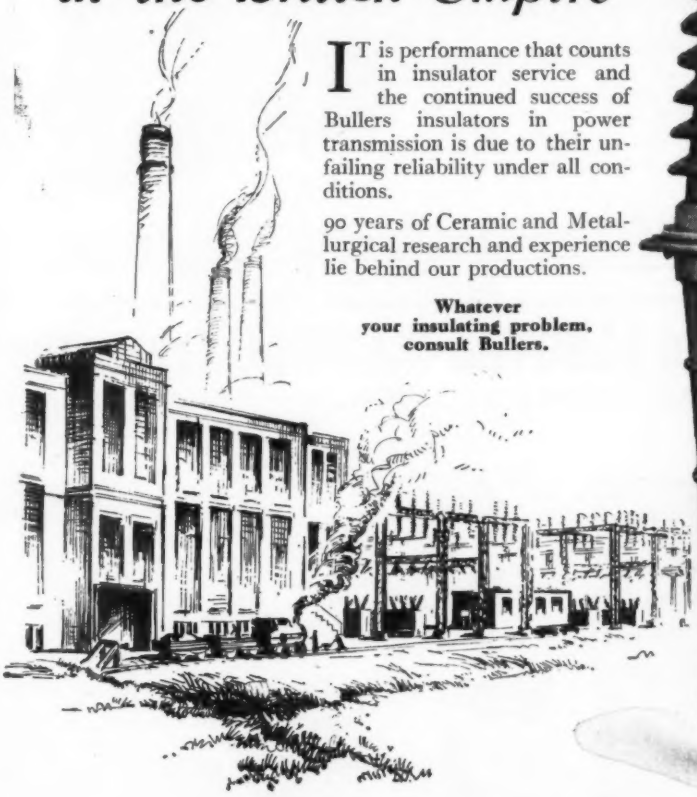
LIMITED, BRIGHTON.

EMPIRE ELECTRIC CONTROL

Raymond

DESIGN PRODUCTION PERSONNEL 100% British

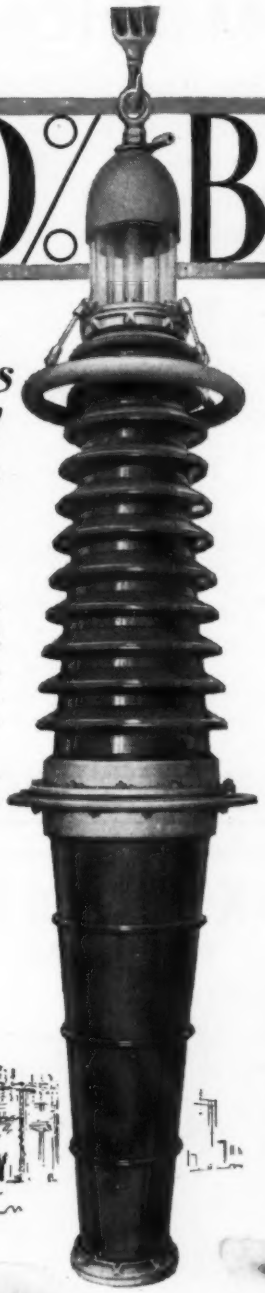
The Largest Manufacturers of Overhead Line and Transmission Equipment in the British Empire



IT is performance that counts in insulator service and the continued success of Bullers insulators in power transmission is due to their unfailing reliability under all conditions.

90 years of Ceramic and Metallurgical research and experience lie behind our productions.

Whatever your insulating problem, consult Bullers.



OIL-FILLED LEADING-IN BUSHING.

A typical example of high grade electro-technical pottery and metal work manufactured throughout and assembled by Bullers Ltd

Bullers

BULLERS, LTD.,
Porcelain Works:
HANLEY & MILTON, STAFFS.
Ironworks: TIPTON, STAFFS.

TRADE MARK

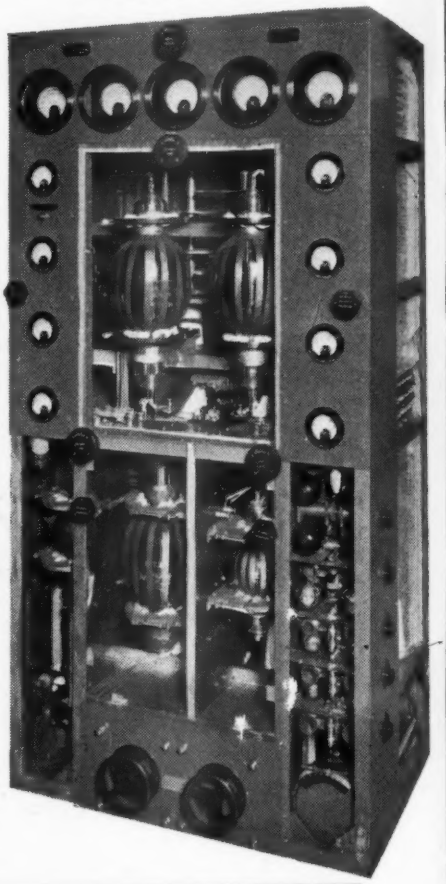
6, LAURENCE POUNTNEY HILL, LONDON, E.C.4.
'Phone: Mansion House 9971
Telegrams: (3 lines)
"Bullers Cannon, London."

WIRELESS TELEPHONY FROM "HOMERIC"

The White Star Liner "Homeric" is the first passenger ship to be fitted with the new short-wave Marine Telephone Equipment, as used by the Marchese Marconi in the recent experiments on his yacht "Elettra" when he carried on a conversation with Australia over a distance of more than 9000 miles, and with London, Buenos Aires, Rio de Janeiro, New York, Montreal, Bombay and Cape Town. This installation is simple to operate and will provide an efficient wireless telephone service for ships at sea over almost any distance. Full details of this and other types of wireless telephone equipment can be obtained from:

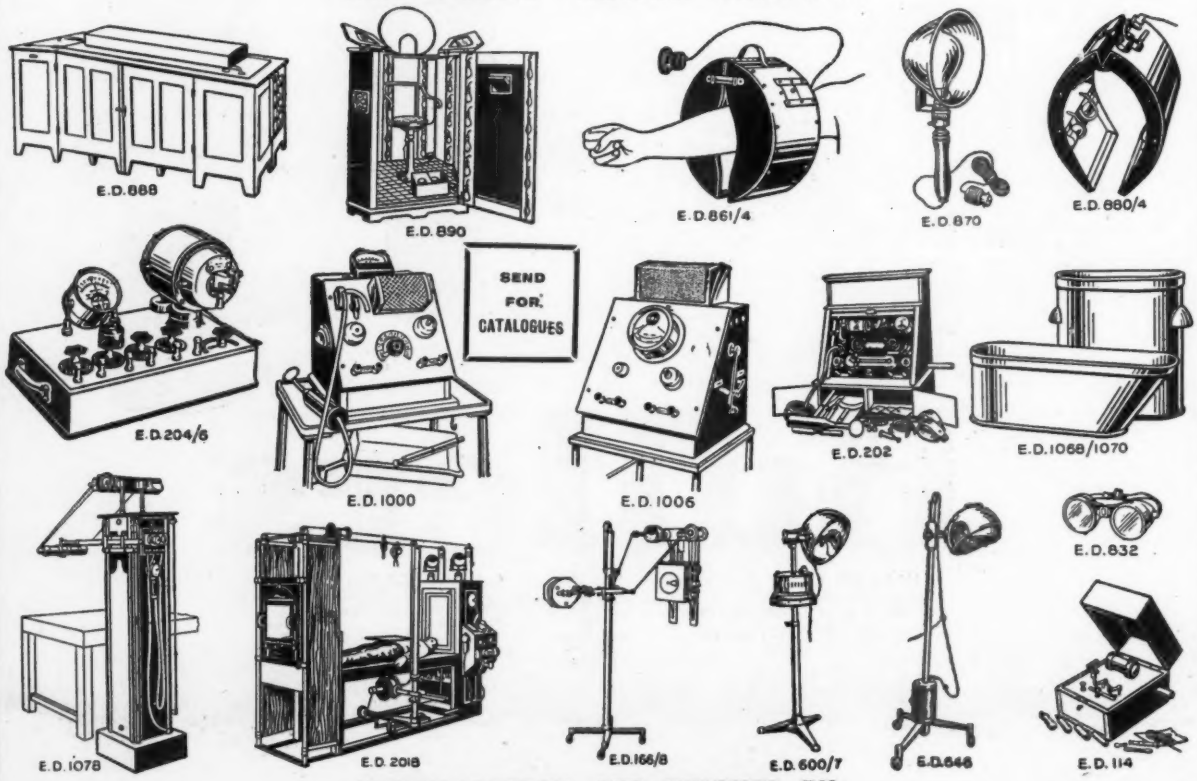
MARCONI'S WIRELESS TELEGRAPH COMPANY, LIMITED,
MARCONI HOUSE, STRAND, LONDON, W.C.2.
Telephone: Temple Bar 4321. Telegrams: Expanse, Estrand, London.

MARCONI TELEPHONE TRANSMITTER FOR SHIPS. Drive and main magnifier panel with front cover removed.



EVERY KIND OF X-RAY AND ELECTRO-MEDICAL APPARATUS

WHOLESALE — RETAIL — EXPORT.



MANUFACTURED AND STOCKED BY:

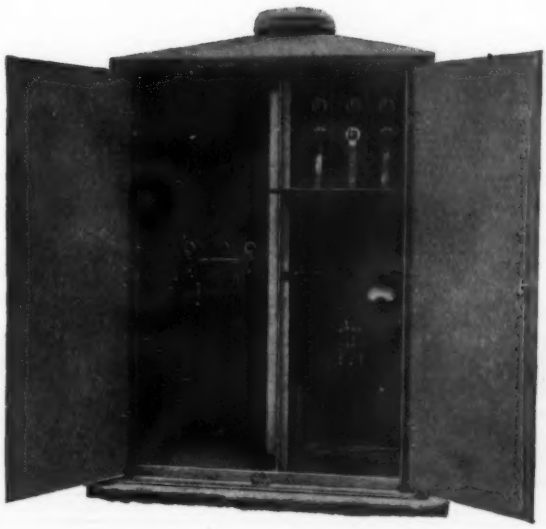
THE MEDICAL SUPPLY ASSOCIATION LTD., 167-185, Gray's Inn Road, LONDON, W.C 1.

THE "CALLENDER" TRANSFORMER PILLAR

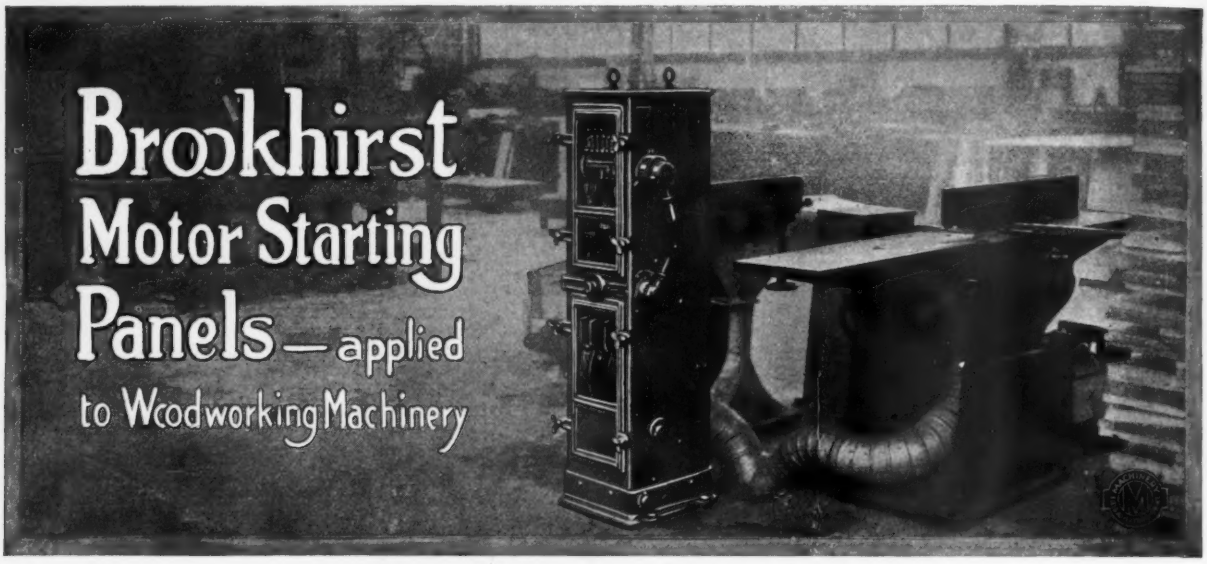
Designed for Safety in operation and accessibility

The larger Transformer Pillar shown above is constructed of $\frac{3}{16}$" mild steel plates, is of the ventilating pattern, and has internal dimensions of 7′ 6″ x 7′ 6″ x 7′ 0″ high. Doors or removable panels are provided on all sides to allow of easy access. The E.H.T. Gear provides for the termination and control of a 3-core ·0225 sq. in. 11,000 volt cable looped in and out. The Pillar will accommodate a 100 K.V.A. Transformer and contains both a metering and a L.T. distributor panel. The smaller Transformer Pillar is designed to receive and terminate one 3-core ·0225 11,000 volt cable; has a Transformer Chamber suitable for a 50 K.V.A. Transformer and provides room for several sets of L.T. 4-core 3 phase gear of the well known C.S.W. unit type.

CALLENDER'S Engineering Department specializes in the design and manufacture of Transformer Pillars and Joint Boxes and will willingly supply information on Electrical Engineering problems to customers stating their requirements.



CALLENDER'S CABLE & CONSTRUCTION CO. LTD.
Hamilton House, Victoria Embankment, London, E.C.4.
Telephone: 8903 Central



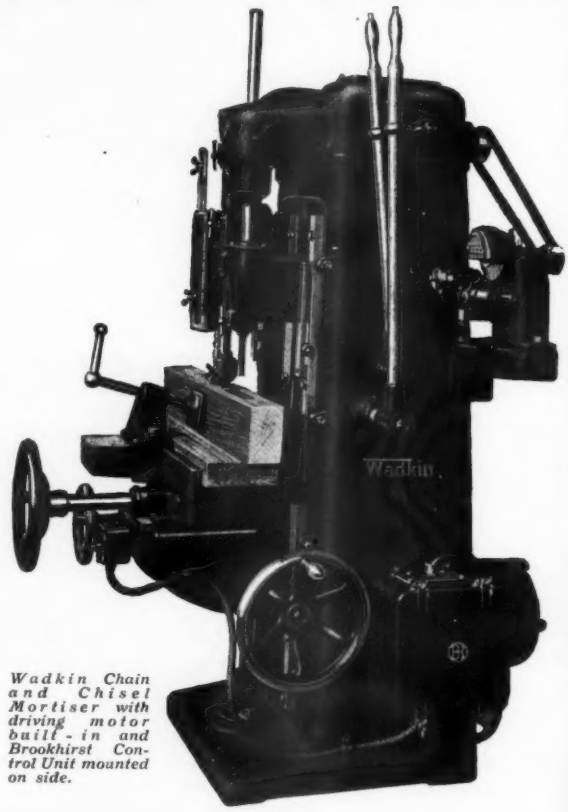
THE woodworking shop is one of the many situations which call for electrical equipment of a particularly robust character. Control gear must be thoroughly dustproof and remain reliable under the worst conditions.

Brookhirst Motor Control Gear fulfils these requirements, and embodies protective features which have caused it to be regarded as the "no trouble" switchgear. Compact designs are available where the manufacturer desires to build the electrical equipment into the machine, and certain manufacturers have standardised on Brookhirst Control Gear for this purpose.

An example may be seen in the Mortising Machine shown alongside. The Brookhirst starter will be seen mounted at the side of the machine. Of the automatic type, it is controlled by "start" and "stop" push buttons, right under the operator's hand.

Even in cases where there are several motors on the one machine (*e.g.*, Tenoning Machine) a small push-button station can be placed close to the operator, while the starters can be accommodated on the most convenient part of the machine.

Write for our booklet C291, "Electrical Control of Woodworking Machinery."



Wadkin Chain and Chisel Mortiser with driving motor built-in and Brookhirst Control Unit mounted on side.

BROOKHIRST SWITCHGEAR

CHESTER.

BAILEY'S

'B.B.' Type GYROMETER or TACHOMETER.

SHOWS SPEED AT A GLANCE IN REVS. PER MIN.

WE make all kinds of Indicators and Recorders for Pressures, Speeds, Level & Flow of Water, &c.

Air Compressors, Steam Pumps, Valves, &c.

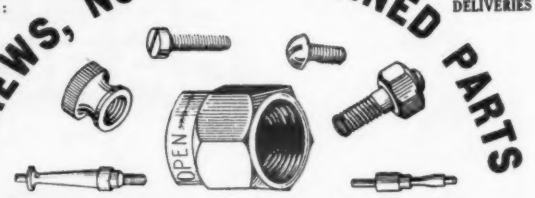
ESTABLISHED 1839.

SIR W. H. BAILEY & CO., LTD., Manchester

SEND YOUR ENQUIRIES FOR B.A. OR WHIT.:

IN ALL METALS. KEEN PRICES. PROMPT DELIVERIES

SCREWS, NUTS AND TURNED PARTS

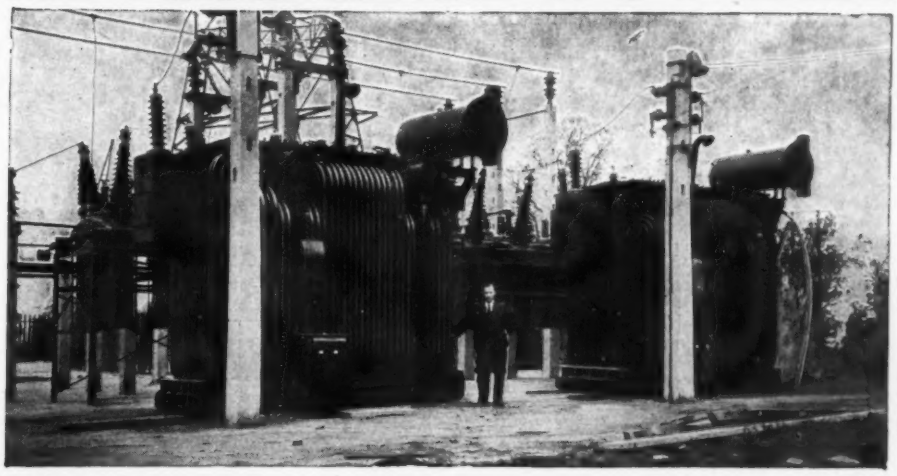


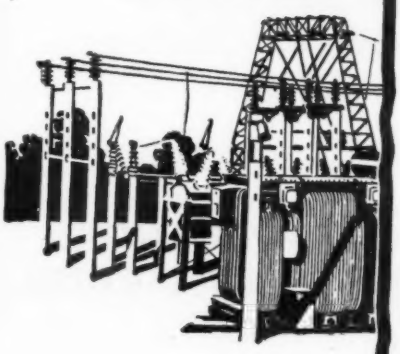
The Electrical Screw and Repetition Works

WOODSIDE GARDENS, BRUCE GROVE, TOTTENHAM, LONDON, N.17.

BRUSH Transformers

for outdoor Sub-Stations

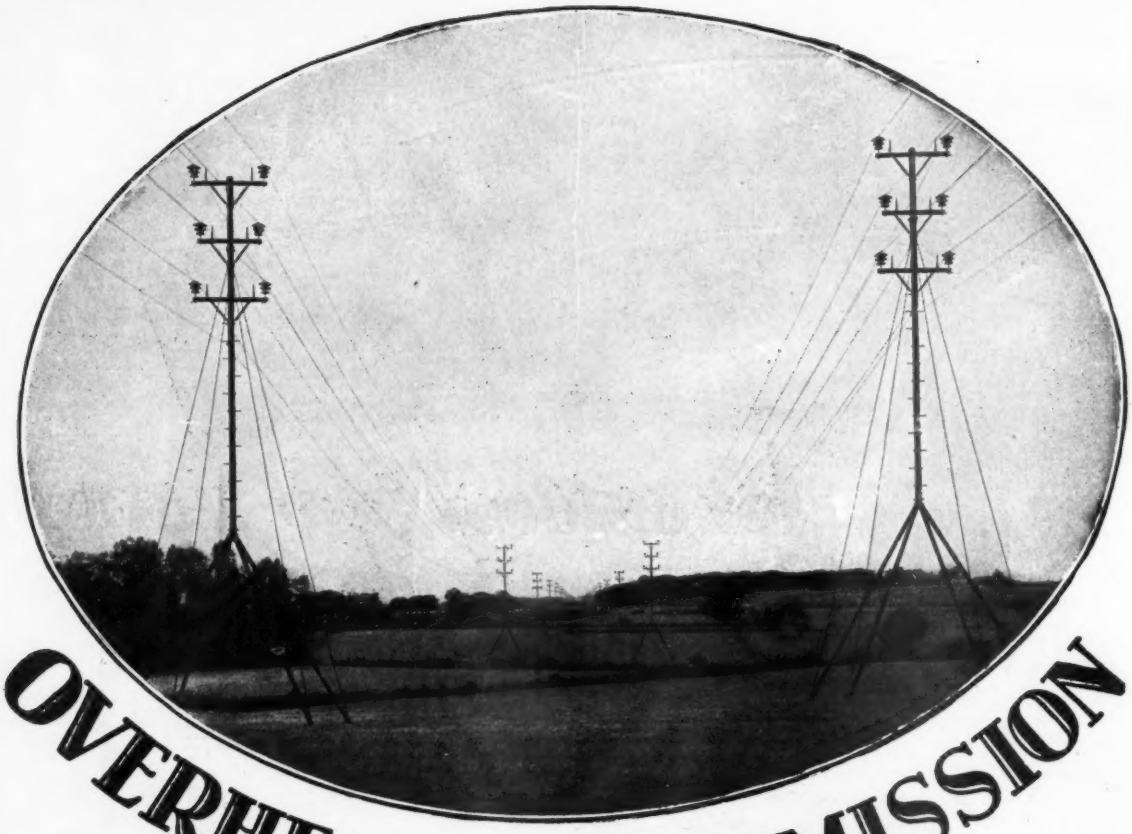




BRUSH TRANSFORMERS have an established reputation for complete reliability under the most strenuous conditions, whilst their performance is excellent. Over forty years of experience is behind the design of every Brush Transformer, so that inside and out it is a first-class job.

The illustration shows a 2,500-kVA, three-phase, 66,000/11,000-volt, 50-cycle core type, oil-immersed naturally self-cooled transformer installed in an outdoor sub-station. A second unit is being installed to operate in parallel with the one already working.

THE BRUSH ELECTRICAL ENGINEERING Co. Ltd.
LOUGHBOROUGH



OVERHEAD TRANSMISSION

with

BARE COPPER STRAND

The overhead Power line shown in the above photograph forms part of a system in the North of England. The conductors are of bare Hard Drawn High Conductivity Copper Strand manufactured by us at Salford, representing that quality which has upheld our reputation for over fifty years.

We specialise in, and will be pleased to quote you for

SOLID COPPER WIRE.
STRANDED COPPER WIRE.
CADMIUM COPPER WIRE.
CADMIUM COPPER STRAND.

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FREDERICK SMITH & CO

INCORPORATED IN THE LONDON ELECTRIC WIRE COMPANY AND SMITHS LTD

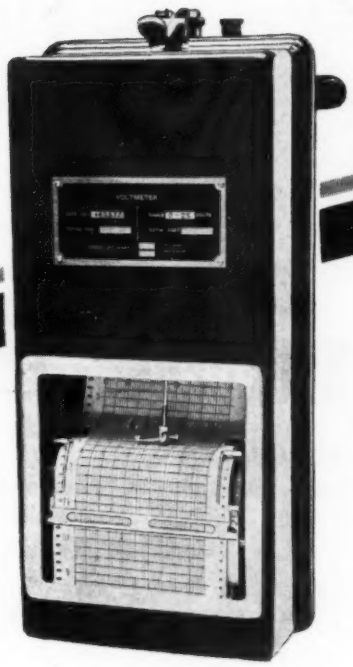
ANACONDA WORKS, SALFORD, Near MANCHESTER

Associated with

The LONDON ELECTRIC WIRE COMPANY AND SMITHS LIMITED

The LIVERPOOL ELECTRIC CABLE COMPANY LIMITED

Efficient & Accurate RECORDING INSTRUMENTS are required for the economic operation of Power Station Plant & for many other purposes



Specify

ELLIOTT

"LINK-PEN" PATTERN RECORDERS

Continuous roll chart.

—

Wide chart—3¾ inches.

—

Straight time lines.

—

New design of pen; pen to paper friction reduced to a minimum.

—

Automatic re-rolling device for winding up the used chart.

—

Accurate time keeping.

—

New chart can be fitted in a few seconds.

Made in

MOVING COIL, MOVING IRON & DYNAMOMETER Types.

These recorders can be supplied with synchronous motor clock if required.

"BRITISH INSTRUMENTS for BRITISH INDUSTRIES."

ELLIOTT
BROTHERS (LONDON) LIMITED,
CENTURY WORKS, LEWISHAM, S.E. 13.
ESTABLISHED 1800
Telephone: Lee Green 4646.

IN ASSOCIATION WITH

SIEMENS
BROTHERS & Co LIMITED,
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ESTABLISHED 1858.
Telephone: Woolwich 1161.

DI-ELECTRIC STRENGTH

3352 VOLTS PER MIL

and after 48 hours' immersion in water

2784 VOLTS PER MIL

SPECIFIC RESISTANCE

$5{\cdot}9 \times 10^{14}$ $w/_{cm^3}$

ARE OFFICIAL TEST READINGS OF

213 "ARMACELL"

Heat and Humidity dangerously lower the di-electric strength of most insulating varnishes

213 "ARMACELL"

ENSURES SAFETY

AT ALL WORKING TEMPERATURES AND UNDER VERY EXACTING CONDITIONS.

When heated from 15° to 90° C. its di-electric strength **falls only 18·5%**

When immersed 48 hours in water its di-electric strength **falls only 17%**

The Insulation Resistance of

213 "ARMACELL"

EQUALS THAT OF GOOD RUBY MICA.

HIGH TENSION OIL WATER

No. 1255B "Ohmaline"

(BLACK INSULATING VARNISH)

Exceptional Penetration

Di-electric Strength **1500 Volts per mil.**

Falls after 48 hours in water **only 3·3 per cent.**

HOT-OIL PROOF.

"SHAYDOLITE"

LAMP LACQUERS

SURPASS

ALL SPRAYED LAMPS FOR RICHNESS OF COLOUR.

A wide range of Colours in Clear, Opal & Frosting Finish.

APPLIED IN A MINUTE.

"INSULDERM" ENAMEL

HEAT-RADIATING.

OIL-PROOF. FLEXIBLE.

Prevents Sparking at Commutator Ends.

Breakdown Voltage 3600 Volts p·o·1 mm.

Suitable for HARD-WORKED TRACTION MOTORS.

"We never had a breakdown with **'INSULDERM'"**

said a New Zealand Tramway Co. after 'Insulderm' had overcome constant trouble.

Also for coating Cotton-Covered and Enamelled Wire.

"ANTI-SULPHURIC"

ENAMEL

IS STILL THE FINEST PROTECTOR

from Acid Fumes and Spray in Battery Rooms, Chemical Works, Mines, &c., &c.

QUICK-DRYING. GLOSSY.

In all usual colours.

INSIST ON SEEING OUR NAME ON EVERY CAN.

WE ARE SPECIALISTS in the production of Paints, Enamels and Varnishes for Protective Work of all kinds. Our wide experience and technical resources are AT YOUR SERVICE for the asking.

Full particulars on application to Sole Manufacturers:—

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Long life wires in a new Colombo College

Reliability becomes a part of any electrical installation in which Henley V.I.R. Wires are used.

The Buddhist Girls' College at Colombo is an instance of wise wiring, with these long life wires as its basis. The installation has 163 lighting points. It was carried out by Messrs. Brown & Co., of Colombo.

Whether you want wires, cables or distribution accessories, take a note of our Branch nearest to you. It is pledged to give you just the service you want.

HENLEY
V.I.R. Wires

W. T. HENLEY'S TELEGRAPH WORKS CO., LTD.,
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AUSTRALIA. — Melbourne: 205-7, William Street. **Sydney:** 83, Clarence Street. **Brisbane:** 59, Elizabeth Street. *Agencies at*—**Adelaide, Perth, Newcastle, Hobart (Tasmania).**

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PALESTINE: I. Archavsky, **Jaffa.**

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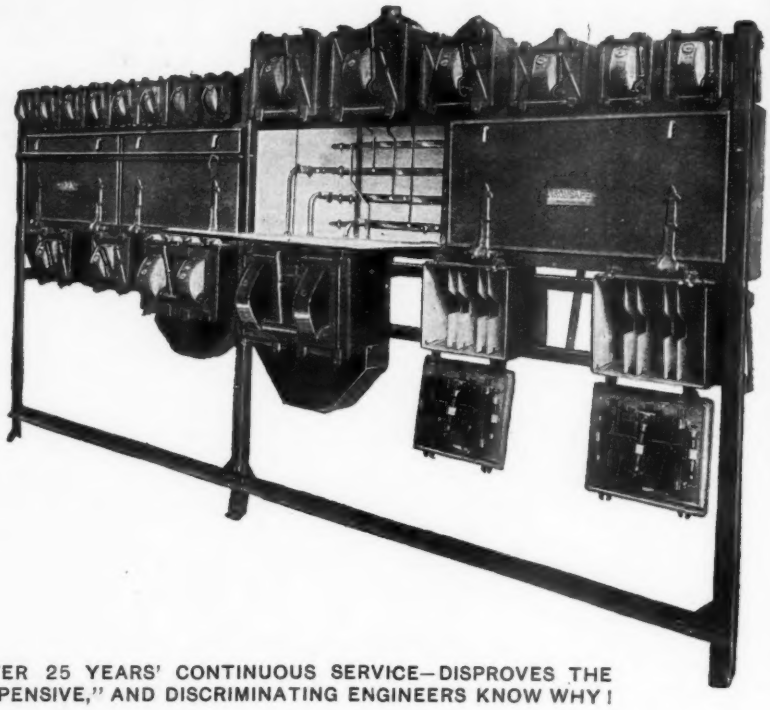
WEST AFRICA.—The United Africa Co., Ltd., and Associated Companies: **Belgian Congo, French Congo, Dahomey, Cameroons, French Guinea, Portuguese Guinea, Gold Coast, Gambia, Ivory Coast, Seychelle Isles, Nigeria, Senegal, Sierra Leone, Liberia.**

755

DON'T SPOIL AN OTHERWISE GOOD JOB BY HAVING A MAIN "SWITCHBOARD," STRAGGLING OVER A WALL—DISJOINTED, AND WITH THE VARIOUS UNITS CONNECTED BY PIPE BENDS AND RUNS.

CONSIDER ALSO THE LABOUR COST INVOLVED!

THE "IRONSAFE" PRINCIPLE ASSURES A BOARD OF ELEGANT APPEARANCE, EFFICIENT IN ALL RESPECTS—A SAVING OF SPACE, AND A CREDIT TO ANY INSTALLATION—IN FACT A NECESSITY WHERE REPUTATION IS AT STAKE.



BERRY SWITCHGEAR—AFTER 25 YEARS' CONTINUOUS SERVICE—DISPROVES THE CONTENTION THAT IT IS "TOO EXPENSIVE," AND DISCRIMINATING ENGINEERS KNOW WHY!

BERRY'S ELECTRIC (1928) LTD.

LONDON: 85 & 86, Newman St., W.1.
BIRMINGHAM: Ironclad Works, Hall Green.
MANCHESTER: 5, Deansgate.

Save Space!

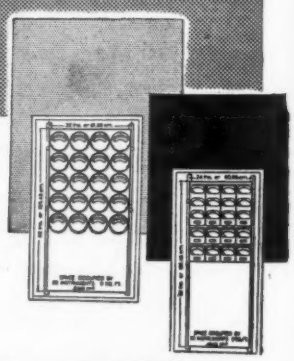
A problem which engineers have frequently to face is that of fitting more switchboard instruments into less space. This problem has been definitely solved by the introduction of the Weston Rectangular Instruments.

They are in every respect the equivalent of the round type, having the same scale length of 5½", but save space in the ratio of 5 to 9.

The design also permits of a clearer and more legible scale entirely free from shadows.

These instruments are efficiently shielded, light, dustproof and easily accessible if removal becomes necessary.

In accuracy, responsiveness and damping they conform to the usual Weston standard.



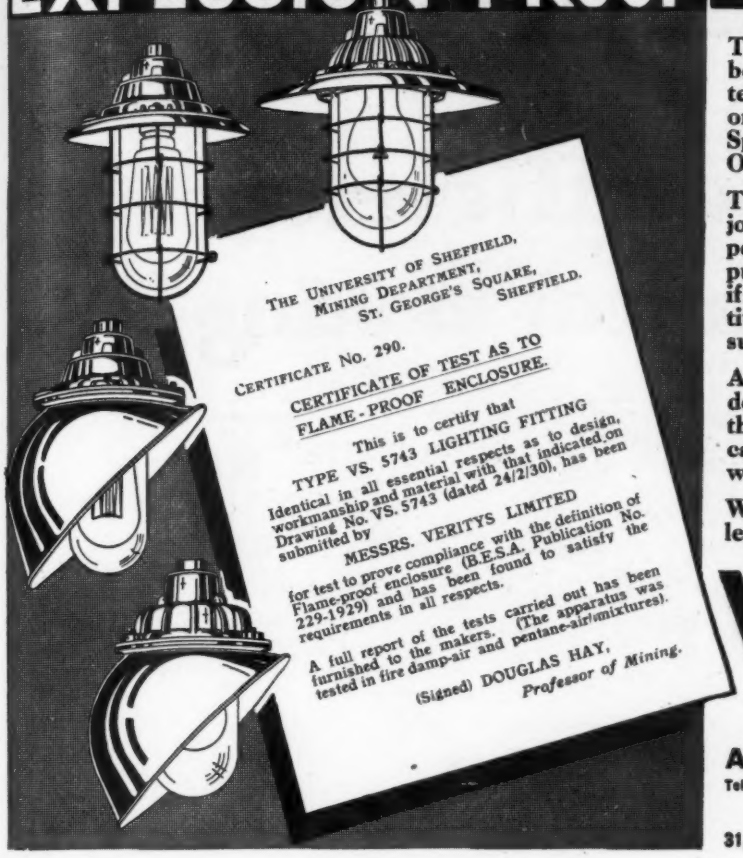
Compare the Difference

In the above examples the rectangular layout requires only a 24" panel against a 32" panel for the round type. The latter also requires greater vertical space.

WESTON
STANDARD THE WORLD OVER
Pioneers since 1888

Advt. of Weston Electrical Instrument Co., Ltd., 15, Gt. Saffron Hill, London, E.C.1.

EXPLOSION PROOF FITTINGS



These Maxlume Safety First Fittings have been designed, after careful experiment and test, for use in proximity to inflammable gases or vapours, e.g. Cellulose Manufacturing and Spraying Plants, Petrol Stores and Garages, Oil Ships, Explosive Mines, etc.

The chief feature is that there are no rubber joints which may be carelessly left off or perish, thus leaving the fitting useless for its purpose. The screws are so arranged that if one should be carelessly left out the effectiveness of the fitting is maintained, and all surface joints are machined.

Another important feature is the interior design, the fitting being entirely cut off from the conduit installation. No explosive fumes can pass into the conduit from the fitting when replacing the lamp.

We shall be pleased to send you illustrated leaflet together with full particulars and prices.

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ASTON - BIRMINGHAM.

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SALES HEADQUARTERS:
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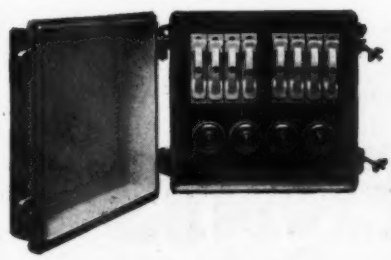
TUCKER TELAC

DEPENDABILITY.



Fuseboards are the "Guardians" of the Installation, and it is therefore of the utmost importance that they should be dependable in every respect.

The old "Tree System" has long given way to the modern Distribution System, but there is the danger that a fuseboard may fail in its purpose if the design and materials used in construction leave something to be desired.

In Tucker Fuseboards, only the best materials are used; their design represents the accumulated experience of over thirty years in which dependability is the "Key-note."

N.B.—A new range of Tucker Fuseboards in Teak and Iron Cases fitted with 15 ampere H.O. type Fuse Units as used in the famous Tucker S.4501 pattern but with 500 volt rating, is now available.

Specify Your Requirements from the 14 Tucker Groups:

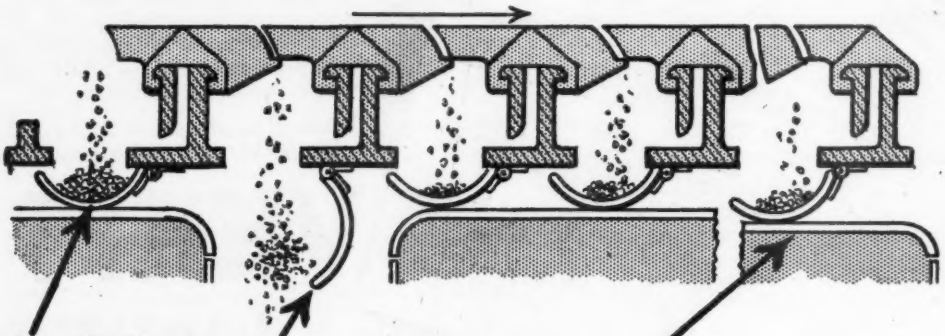
- **Tumbler Switches** *Surface, Semi-recessed, Flush and Ironclad*
- **Switchplates**
- **Sockets and Plugs** *Surface, Flush & Ironclad*
- **Bell Pushes**
- **Iron and Wood Boxes**
- **Lampholders**
- **Pear Switches**
- **Ceiling Roses**
- **Counterweights**
- **Cut-outs**
- **Fuse and Distributing Boards** *in Teak and Iron*
- **Ironclad Switches**
- **Ironclad Fuses**
- **Cooker Control Units**

FOR DEPENDABILITY——SPECIFY "TUCKER"

Tucker TELAC

J. H. TUCKER & CO., Ltd., Kings Road, Tyseley, B'ham.

A new efficiency *in* mechanical stoking



Small fuel falls into hinged Drop-plate conveyors —

and is discharged into a transverse conveyor, taken back and re-burnt.

The angle supports, which actuate the Drop-plates, are vertically adjustable, thus enabling the passage of air up to the links to be regulated to a nicety.

The BENNIS New Patent CHAIN GRATE

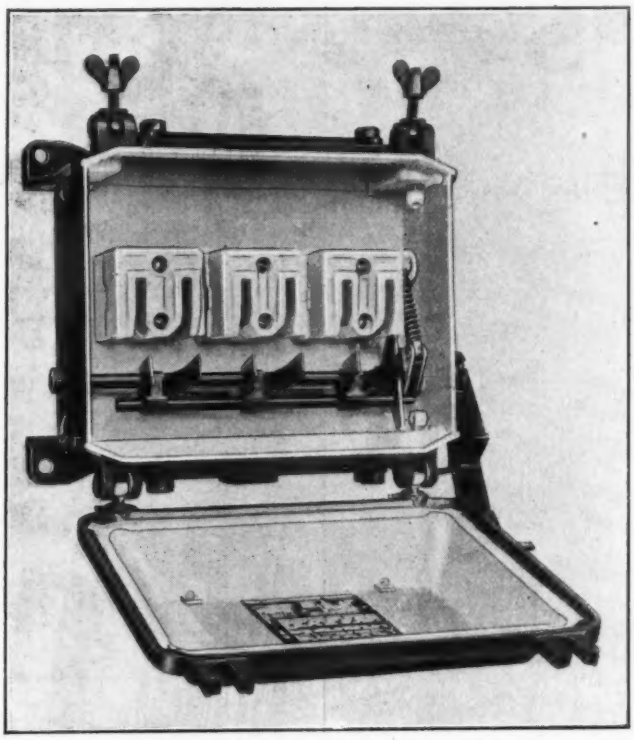
(CARRIER-BAR TYPE)

There is more to tell—much more than we can tell here. Send for our descriptive booklet which explains this great aid to boiler-house efficiency.

EDWARD BENNIS & CO. LTD.,

LITTLE HULTON, BOLTON, & 28, VICTORIA ST., S.W.1.

The two rocker bars are insulated with Bakelite Laminated Tube.



Made by Simplex Conduits Limited, Garrison Lane, Birmingham.

Simplex rely on Bakelite Laminated for Insulation

Bakelite Laminated forms a most reliable material for Electrical Engineers.

It is a hard, strong insulating material with exceptionally good mechanical properties.

Made in sheets, rods and tubes, but can be supplied machined to size and shape.

The well-known properties of Bakelite Mouldings are possessed by Bakelite Laminated but in addition it has great mechanical and dielectric strength.

There is an infinite variety of uses for which Bakelite Laminated can replace wood, hard rubber or metal.

Bakelite Engineering Service.

Nineteen years of experience in the development and manufacture of Bakelite Synthetic Resin Products enables Bakelite Limited to offer the co-operation of their Engineers and Laboratories in investigating the possibilities of these products for new applications.

Write for Brochure L.S. 5.

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Works: Birmingham (Est. 1910) and Darley Dale (Est. 1921). Telephone: Victoria 5441 (4 lines).

BAKELITE

Registered Trade Marks

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CRYSELCO LAMPS

OPAL GASFILLED TYPE

The unique two-skin construction of the Cryselco Opal Lamps definitely reduces deterioration in use. The inside skin of pure glass prevents chemical action between heated gas and the outer opal skin . . . a skin so thin that much less light is absorbed than in cases of one thick opal covering. Where a bright, white evenly diffused light is required, specify Cryselco Opals.

Order your stocks to-day or send for price lists & terms.

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By a special process our Pearl Lamps are frosted inside the bulb, which gives them a very pleasing appearance, leaving the outside perfectly smooth. Harmful glare is to a great extent eliminated and the light distribution is far superior to clear glass lamps. Reduce your stocks by advocating the use of Cryselco Pearl and Opal Lamps.

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CRYSELCO, LTD.,
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METALLIC STEEL CONDUITS

enable you to quote with confidence—be the contract large or small. Their consistent quality and finish—the saving they effect in the wiremen's time—the simplification of fitting—their lasting service—ensure not only that high standard of work that builds big reputations but the economy in costs that produces profits.

Reliable fittings are just as important as good tubing, so why ruin the installation by inferior fittings when Metallic Conduit Fittings are at your command—and cost no more?

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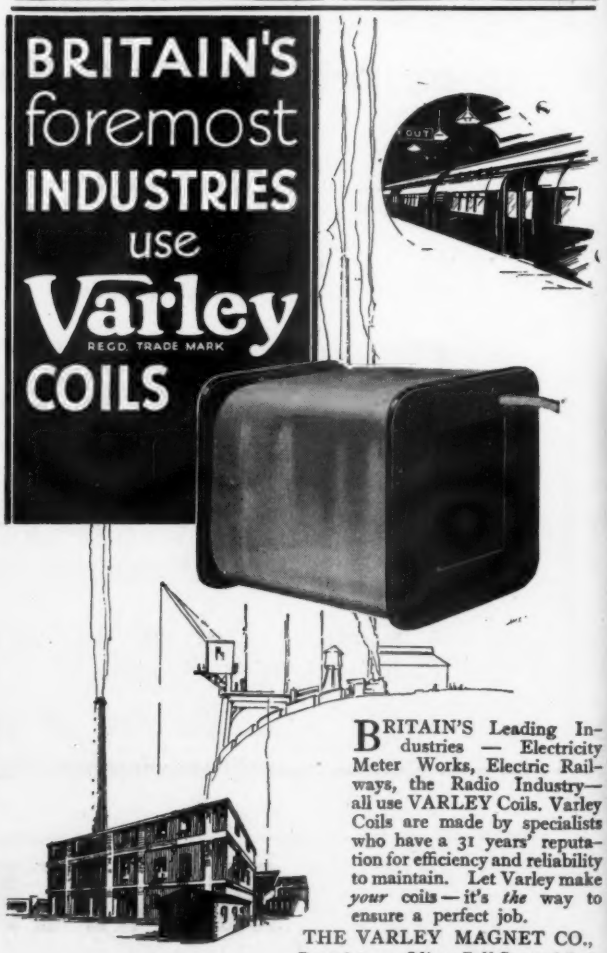
Telephone: CENTRAL 7167. Telegrams: "FLASK, B'HAM."

BRITAIN'S foremost INDUSTRIES use Varley COILS

REGD. TRADE MARK



BRITAIN'S Leading Industries — Electricity Meter Works, Electric Railways, the Radio Industry—all use VARLEY Coils. Varley Coils are made by specialists who have a 31 years' reputation for efficiency and reliability to maintain. Let Varley make *your* coils — it's *the* way to ensure a perfect job.

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Telephone: Woolwich 0888 (3 *lines*).

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AIR CONDITIONING PLANTS

for the Ventilation of Buildings

Sirocco Air Conditioning Plants for the ventilation of buildings provide a constant circulation of pure fresh air—adequate in volume, and of just the right quality as to temperature and moisture content to ensure comfortable and hygienic conditions—and always under perfect control.

DAVIDSON & CO., LTD.,
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BELFAST, IRELAND.

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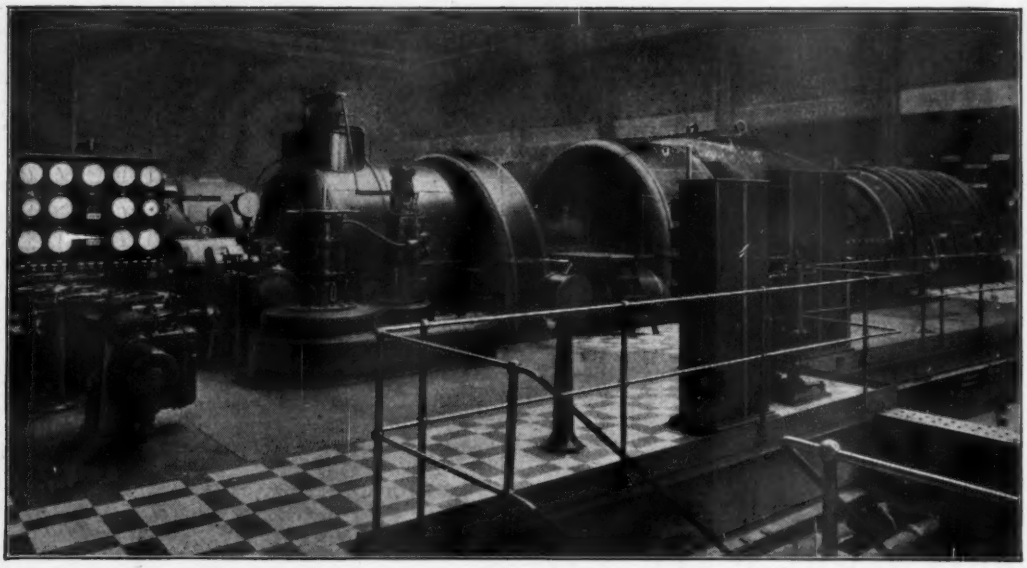
We also furnish Sirocco Air Conditioning Plants for drying and other manufacturing processes



METROVICK AT . . . . DEPTFORD WEST . .

Two of these 35,000 kW "Metrovick" Turbo-Alternator Sets have been installed at the London Power Co.'s Deptford West Station, and a THIRD set has now been ordered identical in all respects.

For linking together their 25 period and 50 period systems, a "Metrovick" 100,000 kW (Peak-load) Frequency Changer is also installed in this station.

METROPOLITAN Vickers ELECTRICAL CO., LTD.

TRAFFORD PARK MANCHESTER

WOODWORKING
"Revo"
COMPANY,
TIPTON, STAFFS.
Proprietors —
REVO ELECTRIC Co
Limited.

ACCURATE WORKMANSHIP.
FIRST-CLASS QUALITY.
LOW PRICES.

LET US
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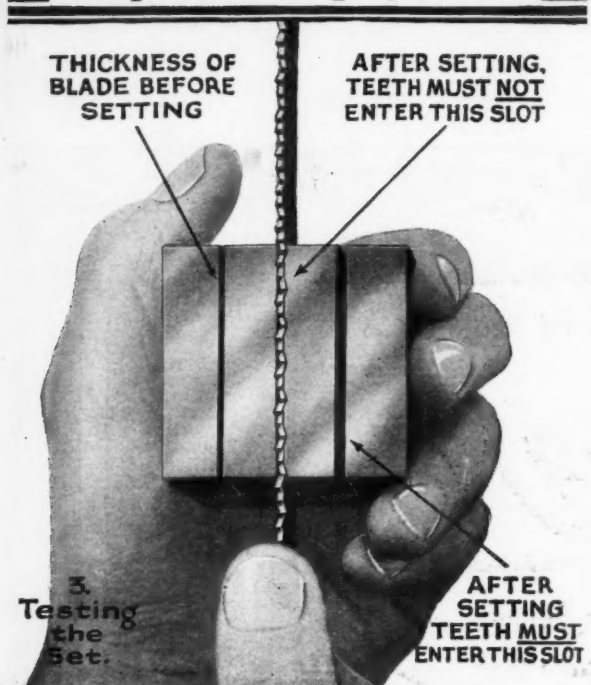
Branches at LONDON, CARDIFF, MANCHESTER, GLASGOW, NEWCASTLE, PORTSMOUTH.

Steps towards perfection



PROVING THE QUALITY!

ECLIPSE HACK SAW BLADES

As the "set" of a blade largely determines its life, "Eclipse" Blades have to pass the above test. This precaution ensures the "set" being neither too heavy nor too light, and is one of the reasons for the uniform high quality of "Eclipse" Blades.

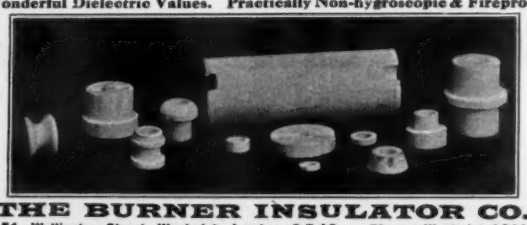
Obtainable from all Tool Dealers.

Sole Manufacturers:

JAMES NEILL & CO. (SHEFFIELD) LTD.
Crucible Steel Manufacturers, Napier St., SHEFFIELD.

Small STEATITE INSULATORS

Machined from natural material to fine limits.
Orders for **one dozen** costing a **few shillings** or **one million** costing a few pounds, receive prompt attention.
Wonderful Dielectric Values. Practically Non-hygroscopic & Fireproof.



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51, Wellington Street, Woolwich, London, S.E.18. Phone: Woolwich 0916.

JaCeM

THE PROFIT IS YOURS.

"Jacem" electrical goods for all household and industrial purposes are selected with that discerning care which combines efficiency and pleasing finish at a moderate price.
All lines offered contain novel features which ensure ready sale at a satisfactory margin of profit.

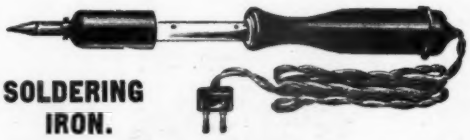
COFFEE PERCOLATOR.

A hygienic jug at last—no tap to corrode and clog—practical and attractive in design.

Voltages: 200/220, 230/250.
Retail Price only **17/6** *each.*

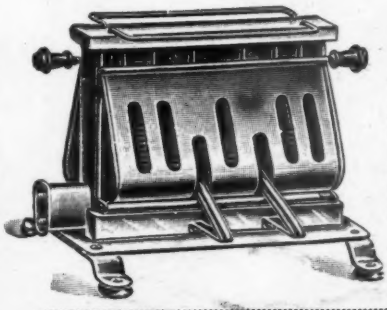
IMMERSION HEATERS.
(CUP TYPE.)

Boils the water in less than half the time than other types. Neat and reliable — fitted with two-pin plug adapter. Voltages: 200/220, 230/250.
Retail Price only **9/-** *each.*



SOLDERING IRON.

Great technical skill and fine craftsmanship have at last produced a Soldering Iron which heats the "bit" evenly and with certainty.
Voltages: 200/220, 230/250. *Retail Price only* **17/6** *each.*



ELECTRIC TOASTER.

Attractive finish; neat design; strong construction. A simple device automatically reverses the slice when one side is toasted.

Voltages: 200/220, 230/250.
Retail Price only **17/6** *each.*

Wholesale Distributors of all "E.L.M.A." Lamps.

Rd JOHNSON CLAPHAM & MORRIS LTD

JACEM HOUSE, TRAFFORD PARK, MANCHESTER.

Telegrams: Metallicus, Manchester. *Telephone:* Trafford Park 2121.
City Offices and Showrooms: 24, Lever Street, Manchester.
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Telegrams: Johnsons, Liverpool.	*Telegrams:* Crossways, Fen, London.	*Telegrams:* Metallicus, Middlesbrough.
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From Scalding to Cool!

at the touch of a lever

"CANVARY" Electric Water Heater.

THIS definite advantage alone makes Berry's CANVARY Electric Water Heater the easiest to sell.

It stores up an ample supply of very hot water and delivers it at any temperature from scalding to cool.

Automatic control and perfect lagging keep running costs at a minimum, while installation is simplicity itself. Only one pipe connection is necessary in the bathroom for hot and cold supply.

Write for complete details, retail prices and trade terms.

BERRYS

CANVARY

ELECTRIC

WATER HEATER

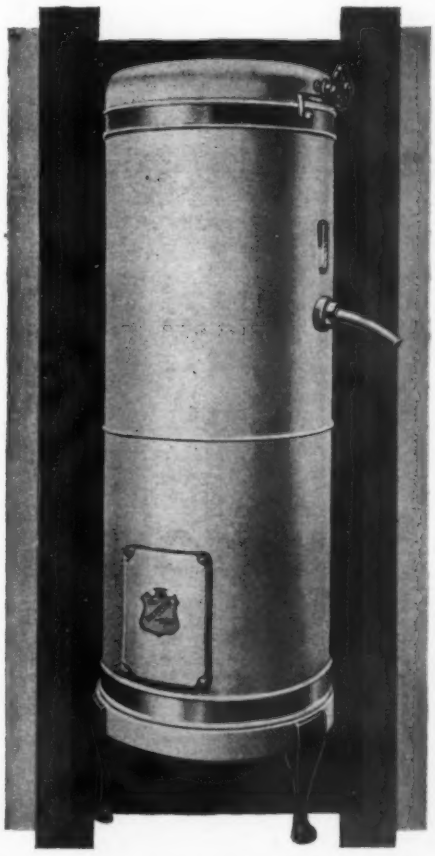
BERRY'S ELECTRIC LTD.

Touchbutton House,
85 & 86, Newman Street, Oxford Street, W.1.

Telephones:
MUSEUM 6800 (3 lines) and 4914 (3 lines).
MANCHESTER: Touchbutton House, 5, Deansgate.

Works:
LONDON, Wembley. BIRMINGHAM, Hall Green.

And at:
EDINBURGH, GLASGOW and DUNDEE:
Messrs. Wood & Cairns, Ltd.



"CANVARY" Electric Water Heater (Bath Model).

ONE OF THE **J.&P.** PAGES

A HISTORIC BRITISH INDUSTRY

Lead mining is one of the oldest British industries, far older than iron or coal mining. Lead was mined in Britain before the Romans came, and during their occupation the industry certainly became a large and important one, exporting the metal to the Continent of Europe and even farther afield.

The small picture in the margin shows a pig of Romano-British lead, which somehow escaped being used up, and so remains to us as a museum specimen after 1800 years.

A modern British lead mine is shown in the larger picture we reproduce. This new mine, the Nantymwyn Mine, near Llandovery, is equipped with the most up-to-date plant, electrically operated throughout. The transmission lines were erected for the Mining Company by Johnson & Phillips, Ltd., and the interior wiring, consisting of J. & P. Cables and Wires, was installed by Mr. M. A. Langlois, Electrical Contractor, Cardiff.

JOHNSON & PHILLIPS, LTD.
Charlton, London, S.E.7

Branches at home:
London, Birmingham, Bristol, Cardiff, Derby, Glasgow, Ipswich, Liverpool, Manchester, Newcastle, Portsmouth & Belfast.

THE MARK THAT MEANS THAT "LITTLE MORE" IN QUALITY

CABLES · OVERHEAD LINES · SWITCHGEAR · TRANSFORMERS

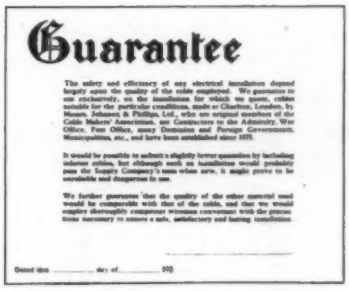
ONE OF THE **J.&P.** PAGES

BIG STORES CAN TAKE NO RISKS

A great store like that illustrated, John Anderson's Royal Polytechnic Ltd., Argyle Street, Glasgow, is full of inflammable goods, and generally crowded with customers. An outbreak of fire might cause great danger to life and enormous loss of property and business. Consequently, the risk of allowing cheap and shoddy cable to be installed by contractors of doubtful reputation is one that a concern like this simply does not take.

The recent large installations in this great building were carried out by Messrs. Malcolm & Allan, Ltd., 499, Eglinton Street, Glasgow, using J. & P. 2,500 megohm grade "C. M. A." V. I. R. Cables.

When tendering to such customers, attach the J. & P. Guarantee Form to your quotation. It will make a real impression. Supplies of the Form will be sent on application.



Guarantee

The safety and efficiency of any electrical installation depend largely upon the quality of the cable employed. We guarantee to use exclusively, on the installation for which we quote, cables suitable for the particular conditions, made at Charlton, London, by Messrs. Johnson & Phillips, Ltd., who are original members of the Cable Makers' Association, are Contractors to the Admiralty, War Office, Post Office, many Dominion and Foreign Governments, Municipalities, etc., and have been established since 1878.

It would be possible to submit a slightly lower quotation by including inferior cables, but although such an installation would probably pass the Supply Company's tests when new, it might prove to be unreliable and dangerous in use.

We further guarantee that the quality of the other material used would be comparable with that of the cable, and that we would employ thoroughly competent workmen convenient with the precautions necessary to ensure a safe, satisfactory and lasting installation.

Dated this ..... day of 193

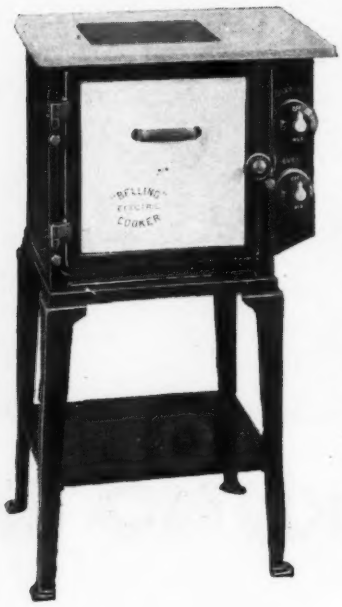
JOHNSON & PHILLIPS, LTD.
Charlton, London, S.E.7

Overseas:
Australia, New Zealand, South Africa, East Africa, India, Ceylon, Malaya, Egypt, China, Argentine, and Brazil.

THE MARK THAT MEANS THAT "LITTLE MORE" IN QUALITY

CABLES · OVERHEAD LINES · SWITCHGEAR · TRANSFORMERS

"I want you to try out these



THE BELLING No. 2A COOKER.

For families of 2-3 persons.

Overall dimensions:

Table model, 20″ wide × 15½″ high × 15½″ deep.

On stand, 20″ wide × 36½″ high × 15½″ deep.

The oven is heavily lagged, lined vitreous enamel and fitted with temperature indicator.

Loading:

Top oven heater, 2,200 watts.
Bottom heater, 1,000 watts.

Hob: 20″ wide × 15″ deep.

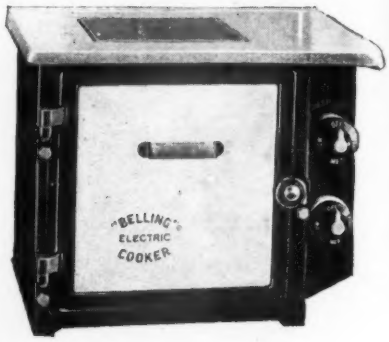
Boiler - Griller: 8¼″ square, 2,200 watts, three-heat.

This also acts as the top oven heater and boils or grills and heats the oven at the same time.

Total loading, 3,200 watts.

Full equipment.

List No. 2A - Price £6 10 0
" With Stand £7 5 0
Patent No. 274,254.



THE BELLING No. 34 COOKER.

For families of 4-6 persons.

Vertical model, 51″ high × 27″ wide × 22″ deep.

Horizontal model, 48½″ high × 44½″ wide × 22″ deep.

The oven is heavily lagged, lined vitreous enamel and fitted with temperature indicator.

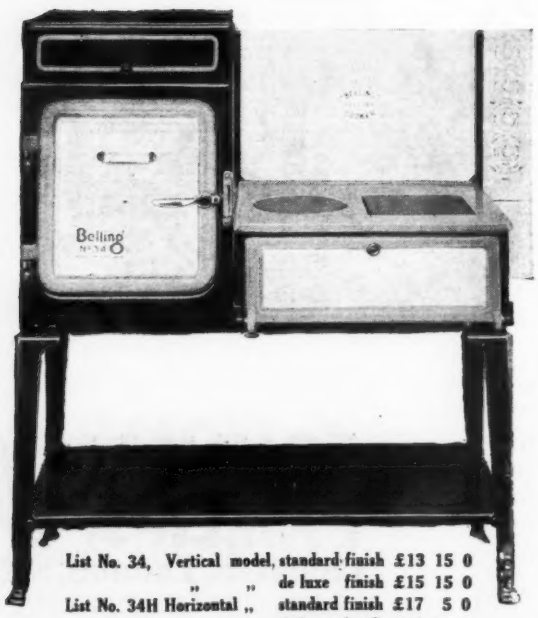
Loading: **Top oven heater, 1,000 watts.**
Bottom heater 1,000 watts.

Hob: 22″ wide × 17″ deep.

Boiler-Griller: 8¼″ square, 2,200 watts, three-heat.

Boiler: 7½″ diameter, 1,200 watts, three-heat.

Total loading: 5,400 watts.



List No. 34, Vertical model, standard finish £13 15 0
" " de luxe finish £15 15 0
List No. 34H Horizontal " standard finish £17 5 0
" " de luxe finish £19 17 6
Patent No. 274,254.

BELLING

these two new BELLING cookers"

because —

1. They are first class in design, construction and practical utility.
2. They have undoubtedly the simplest form of rewindable element on the market.
3. They are made in England with material produced in Great Britain, as

(a) from N. E. England	**Coke, coal, pig-iron, glass.**
(b) from N.W. England	**Sheet copper, asbestos, iron wire.**
(c) from N. Central England	**Rustless steel, chromium alloys.**
(d) from S. Central England	**Sheet brass, cast brass, nichrome, nickel alloy sheets.**
(e) from S. E. England	**Switches, rod brass, screws, stampings.**
(f) from S. W. England	**China clay, ball clay, special sands.**

You will notice our purchases are practically all raw materials.

We have undoubtedly one of the finest plants in the world to produce the articles we specialise in. We don't just say this and stop. We invite you to come and see it!! Anytime!

We have spent many thousands in cooker designs, experiments and efforts in the last 10 years, and now we have a good article which we can definitely recommend.

In these circumstances, will you encourage our further efforts by sending us an order for a sample—we should really appreciate it. For goodness sake don't ask for one on "sale or return," because I think you must admit that in 18 years we have never yet offered or sold you a real "dud" fire or cooker, or failed to give you satisfaction. If we have, you have never told me about it!

I don't quite know how to end up this little talk. By some means I want to induce you to ring your order clerk and instruct him to send us your official order for a No. 2a or a No. 34 immediately you have read this. I believe many of you will, in fact, I am very excited as to what the result of this effort of mine will be. I have written this in the train, just as I've thought of it—at the commencement of a little tour round, to see if I can get some really good orders. Incidentally, I believe this is the very first time I have ever deliberately asked anyone to give me an order. As you know, I generally ask "Got any complaints?" and then get away off on to some other topic.

However, we've done our bit in the past. I believe we were perhaps the pioneers of the open type firebar, the open type boiler, the immersion heater with the removable element, the "Baby" type of cooker (you've bought about 10,000—many thanks) and now we have several new ideas on our latest cookers—so shall I say, will you do your bit now?

I must end—but don't forget to send that official order to-day.

Yours truly,

C. R. Belling.

BELLING & CO.,
ENFIELD, MDDX.
TELEPHONE: - - ENFIELD 1123.

Advt. of The General Electric Co., Ltd., Magnet House, Kingsway, London, W.C.2.

WHEATLEY KIRK, PRICE & CO.

Have for 80 years
Specialised in

VALUATIONS AND SALES BY AUCTION
of
Electrical Works, Plant and Equipment.

LONDON: 46, Watling St., E.C.4. **MANCHESTER:** 16, Albert Square. **NEWCASTLE-ON-TYNE:** 26, Collingwood Street.

Important Sale of RAILWAY CARRIAGE and WAGON BUILDING PLANT, Machine Tools, Stores, &c., at the Abbey Works of CLAYTON WAGONS, LTD., and the Stamp End Works of CLAYTON & SHUTTLEWORTH, LTD., LINCOLN.

Messrs.

FULLER, HORSEY, SONS & CASSELL

will Sell by Auction at the above Works on TUESDAY, JULY 8th, 1930, and following days, at 10-30 o'clock precisely each day, the ENTIRE CONTENTS of BOTH WORKS, including

MODERN ENGINEERS' MACHINE TOOLS

SCREW-CUTTING LATHES, by Lodge & Shipley, Walcott, Le Blond, &c.
TURRET LATHES, by Herbert, Pollock & McNab, Gisholt, Jones and Lamson.
CAPSTAN LATHES, by Herbert, Warner and Swasey.
MILLING MACHINES, by Herbert, Milwaukee, Ryerson.
Butler 13 ft. Plano Miller.
Gear Cutters, by Wallwork, Muir and Sunderland.
BEVEL GEAR PLANER, by Darling & Sellers.
Eight Slotting Machines.
Two Stirk 42-in. Vertical Boring and Turning Mills.
Webster and Bennett 18-in. Duplex Mill.
GRINDING MACHINES, Churchill 18 in. by 84 in. plain Heald and Churchill Internal, Universal Tool and Cutter Grinders.
DRILLING MACHINES, Fourteen Radial, by Asquith, Archdale, "American," Kitchen and Wade, Single and 3-Spindle Sensitive Drills.
Fox & Butler Multi-Spindle Drills.
HORIZONTAL BORING MACHINES, by Dickinson, Richards.
Screwing Machines, by Landis & Hulse.
WILKINS-MITCHELL BEAM END MILLING MACHINE and ELEVEN-HEAD BEAM DRILLING MACHINE.
Rice 80-ton Hydraulic Straightening Press; Key Seating Machines; Punching and Shearing Machines; Stirk 8-ft. Planer; Plate Bending Rolls; Rhodes 8-ft. Plate Guillotine; Berry Plate Straightener; Hydraulic Riveters; Cold Sawing Machines; Thread Milling Machines; Hack Saw Machines; Scriven Bulldozer, &c.

WOODWORKING PLANT

including Circular Saw Benches; Single and Double Spindle Moulders; Dimension Saws; Tenoning Machines; Spoke Turning Machines, Drum and Belt Sanders; Planing and Thicknessing Machines; Saw Grinding and Setting Machines; Mortising Machines; Tool and Cutter Grinders; Band Saws, &c.

MISCELLANEOUS PLANT, including Sentinel No. 3 Air Compressor; Bar Presses; Weighing Machines; Marking-off Tables; Standard Gauge Loco; NEW HIGH-PRESSURE SHUNTING LOCO; NEW STEAM WAGONS; 10-ton oil engine road roller; Ransome 2-ton Electric Truck; Allen 165-kW, 480/500 volt Generator; 110 500-volt d.c. Motors up to 70 h.p.; 180 tons New Steel Sections; large assortment Carriage Builders' Stores, Paints, Varnishes, Oils, Upholstery, Bolts, Nuts, Screws, &c., Office, Canteen, and Kitchen Equipment, and other Effects.

May be viewed on production of catalogue to be obtained of Messrs. Fuller, Horsey, Sons & Cassell, Machinery Auctioneers and Factory Agents, 11, Billiter Square, Fenchurch Street, London, E.C.3. 560

17, WHITECROSS STREET, LONDON, E.C.1.
SALVAGE.

Stock of A.E.G. products
in practically perfect condition.
250 MOTORS AND DYNAMOS, A.C. AND D.C.
All voltages from 1 to 17 h.p.
350 SMALL MOTORS AND SEWING MACHINE MOTORS, TRANSFORMERS,
100 Motor Starters, various; 1,000 Pulleys,
750 Electric Heaters, 400 Electric Fans,
500,000 YDS. CABLE, SINGLE, TWIN AND TRIPLE CORD,
200 Vampire Electric Vacuum Cleaners, 100 Hobby Floor Polishers,
75 large and medium size "Dandy" Floor Polishers,
350 Electric Bedwarmers,
250 Electric Hot-Water Bottles, 200 Electric Hair Dryers,
500 Electric Tong Heaters,
50 Electric Vibro Massage Sets, 500 Armatures, quantity Ebonite Panels, Plugs, Roses, Switches, Resistances.

FRANK G. BOWEN, LTD.

will sell by Auction on the Premises, as above, on WEDNESDAY, July 2nd, 1930, at 11 o'clock.
On view two days prior. Catalogues may be had of the Auctioneers, 62a, Aldersgate Street, London, E.C.1. 521

SITUATIONS VACANT.

Latest time for receiving 5 p.m. Tuesday.

If letters are not to be delivered to certain firms or individuals (if known), instructions to that effect should be sent to the Manager of the ELECTRICAL REVIEW, who will do his best to carry out such instructions. Letters of applicants cannot in such cases be returned to them, nor can the names of Advertisers using a number in any way be disclosed.

Important to applicants
for Situations Vacant—
ORIGINAL TESTIMONIALS
should *NEVER* be sent with applications.

BOROUGH OF BRECON.

Electricity Engineer and Manager.

THE Corporation of Brecon invite applications from Qualified Electrical Engineers for the position of Borough Electrical Engineer and Manager at a commencing salary of £300 per annum, rising to a maximum of £350 by increments of £25 a year.

Applicants must have previous experience of a three-wire d.c. system of distribution with generating plant of the heavy oil engine type.

The person appointed will be required to devote the whole of his time to the duties of his office and must reside in the Borough.

The appointment will be subject to three months notice on either side at any time.

Applicants must not be under the age of 25.

Applications, stating age, present appointment, previous experience and qualifications, accompanied by copies of three recent testimonials, to be sent to the undersigned not later than 11.30 a.m. on the 3rd day of July next. All other qualifications being equal preference will be given to an ex-service man.

Canvassing directly or indirectly will disqualify.

G. HYATT WILLIAMS,
Town Clerk.

Town Clerk's Office,
Guild Hall, Brecon.
June 24th, 1930. 561

STONE URBAN DISTRICT COUNCIL.

Electricity Department.

APPLICATIONS are invited for the position of Working Electrician. Candidates must be experienced in e.h.t. and l.t. overhead and underground working, including overhead line construction, cable laying, jointing, fault finding, and maintenance of transformer sub-station equipment. Commencing salary £200 per annum.

Applications, endorsed "Electrician," together with copies of two recent testimonials, should be forwarded to the undersigned not later that Saturday, July 12th.

CHARLES H. MATTHEWS,
Clerk to the Council.

Town Hall,
Stone, Staffs. 544

ADMINISTRATIVE COUNTY OF LONDON.

THE London County Council requires in September, 1930, at the Hackney Technical Institute, Dalston Lane, E.8, Visiting Teachers of Electrical Engineering for two evenings weekly.

Fee for an attendance of about three hours will be 16s. or 22s., according to the standard of the class to which the teacher is assigned.

Apply Education Officer (T.1), The County Hall, S.E.1 (stamped addressed foolscap envelope necessary) for form to be returned by July 18th. Canvassing disqualifies.

MONTAGU H. COX,
Clerk of the London County Council.

526

ORGANISER WANTED.

LIVERPOOL.—Required, the services of a first-class man, to organise in Liverpool new branch of makers of Association electric lamps. Only men with intimate knowledge of the electrical trade need apply. Applicants should not only be capable of selling personally but be capable of supervising other representatives and directing the keeping of stock and other records.—Write, giving fullest possible details, age, positions held, &c., to Box 124, Sells, Ltd., 168, Fleet Street, E.C.4. 282

GRIMSBY CORPORATION.

Electricity Department.

PLUMBER-Jointer required, experienced in e.h.p. and l.p. cable work. Wages 1s. 7d. per hour. Permanency for suitable man.—Applications, stating age and experience, to be forwarded as soon as possible to the Borough Electrical Engineer, Moss Road, Grimsby. 547

SITUATIONS VACANT.—*Continued.*

ROYAL BOROUGH OF KINGSTON-UPON-THAMES.

Technical College and School of Art.

WANTED, for Session commencing September, 1930, an Instructor for evening classes in electrical engineering. Salary in accordance with the Surrey County Scale for Instructors of Evening Classes in Technical Institutes.

Applications should be made on forms to be obtained from the undersigned.

516 H. T. ROBERTS, B.A., Principal.

REPRESENTATIVES WANTED.

OUR organisation is still growing and we need more Representatives for uncovered territories in London and the provinces. Good salary, commission and expenses paid, while every assistance and excellent prospects are offered men who can show results.—Write, giving all details, age, &c., to Tungsram Electric Lamp Works (Gt. Britain), Ltd., 72, Oxford Street, London, W.1. 283

Cheap prepaid Advertisements are inserted under this heading at the rate of One Penny per Word (minimum 1s.). Three consecutive Insertions for the price of two, if ordered and prepaid with first insertion.
Box Number and ELECTRICAL REVIEW address count as seven words.

Important to applicants for Situations Vacant—

ORIGINAL TESTIMONIALS

should *NEVER* be sent with applications.

A TEMPORARY Sub-station Attendant wanted during holiday period (about 3 months). Must have had previous experience with a.c. 6,600-volts and d.c. 480-volts supply, La Cour motor convertors, &c.—Applications, stating age, experience and enclosing copies only of recent testimonials, to Engineer and Manager, Stepney Electricity Supply Undertaking, 27, Osborn Street, E.1, not later than Monday, June 30th, 1930, endorsed on envelope "Sub-station Attendant." 553

APPLICATIONS in own handwriting are invited for the position of Wayleave Officer. Only young men of good education will be considered, and preference given to those with knowledge of surveying, engineering, and/or law, also capable of fulfilling the duties tactfully.—Reply, stating age, experience, salary, &c., to 523, Electrical Review, 4, Ludgate Hill, London.

CARBON Brush Manufacturers require two or three Representatives on good commission for London, also for Kent, Sussex, Hants., Surrey, Dorset and Wilts, already calling upon and with sound connections with municipalities, electrical undertakings, industrial users of electric motors, maintenance contractors, manufacturers of electrical machinery. Also one having a connection with the principal electrical export houses.—Applications, which will be treated in strictest confidence, should contain full details and be addressed to 559, Electrical Review, 4, Ludgate Hill, London.

COST Clerk with organising ability, energy, initiative, preferably with experience of electrical or radio accessory manufacture, for North London factory.—Write fully, stating age, salary required, to 522, Electrical Review, 4. Ludgate Hill, London.

DESIGNER required by Birmingham manufacturers of high-class lighting fittings; previous experience and practical knowledge essential.—8009, Electrical Review, 4, Ludgate Hill, London.

DRAUGHTSMAN required temporarily, Westminster district. Must be neat, expeditious and experienced in power station layout.—Apply 519, Electrical Review, 4, Ludgate Hill, London.

DRAUGHTSMEN, Senior and Junior, required for development work on electric cookers and domestic appliances of all types. Must have sound drawing office experience and knowledge of modern machine shop methods. Previous experience in a similar line preferable. Juniors to be accustomed to accurate and speedy detailing and layouts. Good prospects. —State salary and full particulars to Domestic Electrification, Ltd., Townsend House, Greycoat Place, London, S.W.1. 558

DRAUGHTSMEN, Senior and Junior, required, for contactor work.—Apply, stating age, full experience, and salary required, to Switchgear Department, The General Electric Co., Ltd., Witton, Birmingham. 446

DRAUGHTSMEN required with experience of metal clad switchgear layouts and diagrams.—Apply, stating age, experience and salary required, to Ferguson, Pailin, Ltd., Higher Openshaw, Manchester. 548

DRAUGHTSMEN, senior and junior, required for high and low tension switchboards, cubicles, &c.—Apply, stating age, full experience and salary required, to Switchgear Department, General Electric Co., Ltd., Witton, Birmingham. 530

SITUATIONS VACANT.—*Continued.*

ELECTRICIAN-in-Charge required, with Central Station experience (especially h.t.) preferred. Grade 8b, Class D, subject to C.O.L. and London Allowance, present value about £261. Candidates are particularly requested to give full particulars of their technical training and qualifications, together with age, copies of recent testimonials, &c., and selected men will be required to undergo a medical examination before appointment and subscribe to the Corporation's Superannuation Fund.—Apply to N. Staniland, M.I.E.E., Electricity Works, Tottenham Lane, Hornsey, N.8. 8134

ENGINEER wanted for shift work in a gas driven generating station in the Midlands. Experience with multi-cylinder vertical gas-engine-driven high tension alternators essential. Commencing salary £4 10s. per week.—Applications giving full particulars should be accompanied by copies of recent testimonials.—542, Electrical Review, 4, Ludgate Hill, London.

ENGINEER-Representative, aged 25-30, required by reputable company. Good opening for live man.—8137, Electrical Review, 4, Ludgate Hill, London.

ESTIMATOR required for dealing with manufacturing costs of electro-mechanical devices, switchgear and accessories. Must have had previous experience.—State experience, age and salary required, to 528, Electrical Review, 4, Ludgate Hill, London.

EXPERIENCED Linesmen required for steel tower and pole lines in Perthshire.—Applications with references to Balfour, Beatty & Co., Ltd., Pitlochry, Perthshire. 535

GENERAL Foreman, with possibility of Managership, wanted for concern near London manufacturing high grade motors in fair quantities. Technical training essential and must have plenty of energy and sound judgment. Age preferably between 28 and 35. £4 per week plus bonus producing £600 to £1,000 per annum to a competent man. Apply in own handwriting, giving salient facts without unnecessary verbiage.—8008, Electrical Review, 4, Ludgate Hill, London.

METER Sales Engineer required for travelling staff of well-known company to promote sales of one of the leading makes of British Electricity Meters. Applicants must have good technical qualifications, practical experience of meters, and be capable of effecting sales to municipal and supply undertakings.—Applications to include full details of age, qualifications, and experience, together with remuneration expected, to 522, Electrical Review, 4, Ludgate Hill, London.

REPRESENTATIVE required immediately by a London firm, for the Midlands, for the sale of low priced vacuum cleaners, and domestic appliances, &c. Applicants must have connection with wholesale houses and stores. A part of existing connection to be handed over to satisfactory man. Applicants must pass fidelity bond. Remuneration, salary and commission.—Write, giving full particulars, to 8091, Electrical Review, 4, Ludgate Hill, London.

REQUIRED in Malaya, two Assistant District Engineers. Applicants must have good technical training and some experience of overhead lines and sub-stations. Also one Assistant Consumers' Engineer. Applicants must have good technical training and some practical and commercial experience of tariffs and the application of a.c. plant for industrial purposes. All the above appointments for four years at commencing salary of £500-£550, according to experience and qualifications. Free quarters provided or allowance in lieu thereof and free passage and medical attendance. Applicants should be 25-30 and preferably single.—Apply by letter only, marked "District" or "Consumers' Engineer," stating age, whether single or married, giving details of training, qualifications and experience, accompanied by copies only of testimonials, to The Secretary, The Perak River Hydro-Electric Power Company, Limited, 3, Central Buildings, Westminster, London, S.W.1. 518

REQUIRED Youth, 18-20, with experience of electrical stores office, knowledge of current prices of electrical accessories.—8128, Electrical Review, 4, Ludgate Hill, London.

SALESMEN.—The British Electric Transformer Co., Ltd., have a few vacancies for Salesmen for their All-British Kye Electric Lamp. Excellent progressive positions available for men with proved selling ability and capable of producing substantial business. Salary and expenses.—Write in confidence, giving full particulars of previous experience, age and salary required, to Wellington House, 125-130, Strand, W.C.2. 8011

SHIFT Charge Engineer wanted for generating station in the East, four years' contract. Applications will only be considered from candidates between 26/30 years of age (single men preferred), who are thoroughly conversant with modern power station operation and have actual experience in stations of 20,000-kW capacity, B.T.-H. turbo-alternators, and B. and W. water-tube boilers.—8088, Electrical Review, 4, Ludgate Hill, London.

THE L.P.S. Electrical Co., Ltd., require Travellers possessing a sound knowledge of the wire business and good connections, for Scotland, North of England and the West Country, to sell their well-known products, including instrument and resistance wires and insulating materials.—Address, with full particulars, L.P.S. Wire Works, Ealing Road, Alperton, Wembley, Middlesex. 517

SITUATIONS VACANT.—*Continued.*

TRAVELLER required with electrical contractors, salary and commission.—Apply by letter only to Macdonald, Syer & Co., Ltd., 295, Grays Inn Road, W.C.1. 556

TRAVELLERS wanted for London and provinces for wholesale distributors to the electrical and radio trades, proprietary and non-proprietary. Must have thorough and sound connection.—Full particulars to 8086, Electrical Review, 4, Ludgate Hill, London.

WANTED immediately, Armature Winder (young man preferred) for automobile work and small drills, &c. Must be capable of carrying out complete overhauls to any type of generator, &c.—Only first-class men who have specialised in this branch of work, need apply to Ratcliffe & Thornton Bros., Magneto Works, Manchester Road, Nelson. 413

WANTED, North Staffs district, Chargehand and Wiremen with tubing experience.—Write stating experience, Harland, 196, Greengate, Manchester. 549

APPOINTMENTS FILLED.

Dissatisfaction having been so often expressed that unsuccessful applicants are left in ignorance of the fact that the position applied for has been filled, may we suggest that Advertisers notify us to that effect when they have arrived at a decision. We will then insert a notice free of charge under this heading.

EAST Anglian Electric Supply Co., Ltd. (Assistant Engineer); Box 438 (Junior Assistant); Box 296 (Junior Draughtsman); Box 357 (Assistant Electrician); British Electric Meters, Ltd. (Salesman); Box 7972 (Assistant Salesman); Borough of Walthamstow (Mains Assistant); Borough of Walthamstow (Temporary Mains Draughtsman); Borough of Pudsey (Plumber-Jointer); Box 7979 (X-Ray Installation Engineer).

SITUATIONS WANTED.

INDUSTRIAL ENGINEER.

A.M.I.E.E., A.M.I.Mech.E., trained in modern methods factory engineering and maintenance, economical steam and electric power generation and distribution. Refrigeration, compressed air, and vacuum services; chemical, machine tool, building, and constructional steelwork experience. Good organiser, speaks French; age 38.—8102, Electrical Review, 4, Ludgate Hill, London.

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A BETTER chance desired by gentleman, age 26, single, to secure a more progressive appointment with municipal or supply undertaking at home or abroad. Four years in present capacity of mains and consumers' clerk with municipal undertaking of 10,000 consumers. Fully experienced in entire management and supervision of staff and accounts, &c. Six years' sales office experience with electrical manufacturing company of repute. Good theoretical technical knowledge, capable of managing or assisting with showroom and would welcome an opportunity of same. Will consider proposition offering sound prospects of advancement, salary being of secondary consideration.—8099, Electrical Review, 4, Ludgate Hill, London.

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BUYER.—Engineer with wide commercial and practical experience; essential for economical buying of material for small engineering and apparatus; desires change.—8132, Electrical Review, 4, Ludgate Hill, London.

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COMPETENT Mechanic, specialising in watertight systems and intricate wiring on power and lighting installations, seeks position as general or working Foreman.—F., 35, Clematis Street, W.12. 8034

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ELECTRICIAN, day or piece work, maintenance and power, lighting, bells.—H. B., 4, Ringmer Avenue, Fulham. 8087

ELECTRICIAN (35), good all round; quick; anywhere.—"Electrician," 37, Euston Street, N.W.1. 8135

ELECTRICIAN, competent; all branches; contract, main.—F. H., 2, Collerston Road, S.E.10. 8051

ELECTRICIAN, wiring, all-round hand, batteries, &c., town or country.—9, Ripplevale Grove, N.1. 8065

ELECTRICIAN-Wireman seeks situation; all systems.—11, Southampton Buildings, Lymington, Hants. 8045

ELECTRICIAN Improver, experience all systems.—W. Gooch, 184, Bravington Road, W.9. 8109

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ELECTRICIAN, installations, screwed, &c.; reliable workmanship.—Sparks, 189, Saltram Crescent, Paddington, W.9. 8131

ELECTRICIAN-Wireman, all systems; age 36.—A. Daniels, Stanley Cottage, Pineapple Road, Amersham Common. 8106

ELECTRICIAN-Fitter (27), desires employment; capable and willing.—13, Buxton Road, Thornton Heath, Surrey. 8130

ELECTRICIAN-Wireman, competent workman, requires employment; long experience all branches; references.—C., 140, Oxford Gardens, W.10. 8060

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EX-Torpedo Rating Assistant, care and maintenance plant, factory, &c.; 15 years' general electrical work, lighting, telephones, batteries, lifts, &c. London preferred.—8090, Electrical Review, 4, Ludgate Hill, London.

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'Grams: Topical, Sheffield.

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New and Re-conditioned

ELECTRIC MOTORS, GENERATORS,

TRANSFORMERS and SWITCHGEAR.

Actually in our Stock.

ALL GUARANTEED FOR TWELVE MONTHS.

SPECIALITY.

Complete Equipment of Works

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Alternating Current Plant

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FOR SALE.—*Continued.*

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LESLIE DIXON CO. offer the contents of a Research Laboratory equipped at a cost of over £1,000 for electrical and radio work. Most of the apparatus is in new and spotless condition and would provide a first-class outfit for the Laboratory of a Technical College or an enterprising manufacturer.

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A HIGH-SPEED RECORDING McLACHLAN equipment by Marconi and Sullivan which can record at four times the highest speed of any commercial system in use. Complete in every detail and brand new. Cost £350.

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HEAVISIDE BRIDGES for Inductance, Frequency and Capacity tests with accessories by Gambrell, &c. A Tinsley, with Variable Mutual Inductance and Valve Resonator. This set cost £50 and is unused. Set for Coil Inductance Testing.

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SWITCHGEAR. High Insulation D.P.C.O. on ebonite pillars. Ironclad motor gear. Quantity of Lab. Resistances from ½ ohm to 3,000 ohms, ¼ amp. to 100 amps.

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RADIO SETS, 2 McMichael S.G. Portables. Burndept, G.E.C. and Radio LL Superhet. Sets all with valves. A 2 V Grebe-Armstrong and several frame aerials. Transmitting helices and 20 pairs of Brown headphones. Two unused Fultographs and amplifier. There are a large number of other items which would take pages to describe.

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SUNDRIES. Galvo. keys. Reversing Switches, Interruptor, Moll Thermopile, Cambridge Einthoven String Unit. Electroscope with scope eyepieces, High Temp. Thermometers. Tiny arc lamps for Micro or Oscillograph 100 amps. focus Osram bulb. Two Weston Standard Cells.

The apparatus may be viewed at our showrooms at any time between 9 a.m. to 6 p.m.

LESLIE DIXON & CO.,
218, Upper Thames Street, E.C.
Telephone: City 0191. 525

MOTORS, &c., FOR SALE.

70-H.P. Electric Motor, 440 volts, d.c., speed 350 r.p.m.

50-h.p. B.T.H. Electric Motor, 500 volts, d.c., 530 r.p.m., series wound.

50-h.p. Electric Motor, 400/500 volts d.c., shunt wound, by the Submersible Motors, Ltd.

50-kW Generator (makers, Newtons), 440/460 volts, d.c., shunt wound, 780 r.p.m.

16-kW Generator, E.C.C., 80 volts, d.c., 200 amps., shunt wound.

STANLEY ENGINEERING COMPANY : BATH.
Telephone: 4294 Bath (2 lines). 545

FOR SALE.—*Continued.*

FOR SALE, BY PRIVATE BARGAIN, AS A WHOLE OR IN LOTS TO SUIT PURCHASERS.

200-KW, a.c., three-phase, 50-period Generating Set—vertical compound enclosed self-lubricating Engine, by Belliss & Morcom, Ltd.; coupled direct to 200 kW, a.c., three-phase Westinghouse generator, periods 50, volts 600, revs. 428; with d.c. shunt-wound exciter and electrically-driven Westinghouse Leblanc Multiple Jet Condenser and connections.

Two 75-kW, a.c., three-phase, 50-period Generating Sets—vertical compound enclosed self-lubricating engines, by Belliss & Morcom, Ltd.; coupled direct to 75 kVA, a.c., three-phase Westinghouse generators, periods 50, volts 600, revs. 600; each with d.c. shunt-wound exciter, electrically-driven single jet Westinghouse condenser and connections.

Six-panel a.c. enamelled slate Switchboard, with instruments.

Two 75-b.h.p., a.c., three-phase Westinghouse slip-ring Motors, periods 50, volts 600, revs. 575.

75 b.h.p., a.c., three-phase, slip-ring Motor, by Metropolitan Vickers Co., Ltd., periods 50, volts 600, revs. 575 (almost new).

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10 b.h.p., a.c., three-phase, squirrel-cage Westinghouse Motor, periods 50, volts 200, revs. 570; with Westinghouse transformer, periods 50, volts 550, secondary volts 220.

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300 yards, almost new, 37/13 three-core S.W.A. paper-insulated bitumen-filled Cable on drum.

60 yards 19/14 three-core S.W.A. paper-insulated bitumen-filled Cable.

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Weir Vertical Boiler Feed Pump, 5 in. by 7 in. by 12 in.; Tangye Duplex Steam Pump, 4½ in. steam, 3 in. water.

Full particulars from R. B. Heckie & Co., Electrical Engineers and Machinery Merchants, 11/13, Commerce Street, Glasgow. Telegrams: Frequency Glasgow. 534

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Portable Petrol-electric Water Cooled Lighting Plants.

Engine.	Dynamo.	Voltage.	Amps.
Parson	Crompton	25	100
Austin	Westinghouse	35	20
Parson	Crompton	40	100
Austin	City Electric	50	20
Aster	Electric Cons.	80	100
Aster	Electric Cons.	100	80
Petter	Holmes	110	27
Lister	Mawdsley	110	27
Austin	General Electric	110	32
Austin	Siemens	110	43
Pelapone	Crompton	110	45
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Gardner	Electromotor	110	75
Gardner	Lancashire	110	123

Send for further details—over two hundred sets to be cleared quickly at absurdly cheap prices—also Cables, Lamps, Floodlights, &c. New Switchboards for the above plants, £5 each.

BURLEIGH, 45, Hornsey Road, London, N.7. North 1675. 39

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ROTARY Convertor, 550 kW, 6,600 V, a.c., 500 V, d.c. £350.
500-h.p., 500-V, d.c., 470 revs., 3-bearing Motor. £300.
300-h.p., 220-V, d.c., 450 revs., 2-bearing Motor. £200.
220-kW, 220-V, d.c., 2 0 revs. Diesel Set. £900.
400-kW, 220-V, d.c., Belliss & Morcom Steam Set. £650.
400-kW, 500-V, d.c., Geared Turbo Set. £750.
750-kW, 500-V, a.c., mixed pressure Turbo Set. £1,000.
750-kW, 440-V, a.c., Belliss & Morcom Steam Set. £850.
1,000-kW, 440-V, a.c., Parsons Turbo Set. £1,500.
3,000-kW, 6,600-V, a.c., Fraser & Chalmers Turbo Set. £2,500.
1,000-kW, 6,600/440-V, 3-phase, 50 periods Transformer. £350.

8107, Electrical Review, 4, Ludgate Hill, London.

WATER-TUBE BOILERS.

WATER-Tube Boilers for Sale, with immediate delivery: "B. & W.," "Stirling," "Woodeson," &c. Sizes from 5,000 to 30,000 lb., all working pressures. All recent make, in new condition. Erected complete and guaranteed. Economisers, Generating Sets, Motors, and all Auxiliaries.—Burford, Taylor & Co., Boiler Specialists, Middlesbrough. 21

FOR SALE.—*Continued.*

FOR SALE.

ONE 1,000-kW Turbine, English Electric Co., 140 lb. per square inch steam pressure, direct coupled to 3-phase alternator, 50 periods, 6,600 volts.

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Five Babcock Boilers, each 10,000 lb. per hour, 2,582 sq. ft. heating surface, complete with superheaters and chain-grate stokers, 150 lb. working pressure.

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All the above cheap for quick clearance. Apply

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500 MOTORS, Dynamos, Transformers, all voltages and frequencies.

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Telegrams: Rheostat, West Bromwich. 16

One Siemens C.B. 50-line Telephone Equipment, Complete. All practically as new.

PEDESTAL cord type Switchboard, with lamp calling and supervisory signals. Two hand sets for operator. Ringing by battery-driven vibratory pole changer or magneto hand generator. Fifty Instruments (wall and desk type). Marble Charging Switchboard, with meters and change-over switches. Main terminal frame in glass-fronted cabinet. Double set of Storage-battery Glass Boxes, but no battery plates.

Wanted to clear, low price accepted. Apply to the Electrical Engineer,

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Motors.—3-ph., up to 100, 150, 225, 300, 400 and 500 h.p.
Alternators.—35 kVA, 220 V and 440 V, 3-ph., 50 per.
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GREENHALGH BROS., Atherton, nr. Manchester. 17

ELECTRIC MOTORS AND DYNAMOS.

WE hold one of the largest Stocks of New and Second-hand Motors. Second-hand Machines are thoroughly overhauled. Inspection and Tests can be made at our Works.

For Sale or Hire. Send your inquiries to Messrs.
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FOR SALE.—*Continued.*

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THE Great Yarmouth Corporation Electricity Department have for immediate disposal the undermentioned Frequency Changers, in first-class condition as new, both manufactured by the Brush Electrical Engineering Co., Ltd., Loughborough.

One 1,000-kW Frequency Changer, 3-phase, 50 cycles, 3,850 volts to single-phase, 87½ cycles, 2,200 volts, speed 750 r.p.m. Machine No. 19866.

One 500-kW Frequency Changer, particulars as above, Machine No. 18834, together with necessary switchgear in connection with above plant.

ALSO

One 16-panel, single-phase, 2,200-volt Switchboard, complete with cubicles, made and supplied by Messrs. Cromptons in 1914.

Site must be cleared to make room for extensions. Offers to be made to

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200 h.p.	Fuller	960	,,	,,	,,
170 h.p.	,,	960	,,	,,	,,
140 h.p.	,,	960	,,	,,	,,
130 h.p.	C.E.C.	735	,,	,,	,,
60 h.p.	L.D.M.	960	,,	,,	,,
50 h.p.	E.C.C.	720	,,	,,	,,

Send your inquiries. We have several hundred motors in stock. 461

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WE would draw the attention of purchasers that we carry a stock of 500/1,000 Motors and Generators, both a.c. and d.c., from ¼ h.p. to 100 h.p. and we only handle modern machines, which we guarantee for twelve months.

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THE CENTRAL ELECTRICAL ENG. WORKS,
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ROTARY CONVERTOR FOR SALE.

ONE 400-kW rotary Convertor, 6 ring, d.c., 460 volts, with transformer, 11,200/335 volts, 3/6-phase, 50 periods, and d.c. switchboard; as new.—Midland Counties Electrical Engineering Co., Ltd., Grice Street, West Bromwich. Tele.: Rheostat. 24

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A LARGE stock of Searchlights for Sale or Hire; also carbons, mirrors, &c.—London Electric Firm, Croydon. 434

ALLEN Steam Generating Set, 125 kW, 110 volts, d.c. Browett-Siemens ditto, 150 kW, 460/500 volts, d.c. Allen ditto, 45 kW, 220 volts, d.c. Sissons-Crompton ditto, 10 kW, 110 volts, d.c.—Harry H. Gardam & Co., Ltd., Staines. 'Phone 98. 476

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DIX-Onemeter 55-range meter, micro. and amps., milli and volts, ohms and megs., all on one precision moving coil Meter. Accurate and marvellously cheap. 50s. Worth £10.—Leslie Dixon Instruments, 218, Upper Thames Street, E.C.4. 10

ELECTRIC Motors, 220/230 volt, 3-phase, 50 cycles, wound rotor, complete with bed plate, pulley and starter; six 10 h.p., thirty-four 15 h.p., one 20 h.p. All in first-class condition. Three Transformers, 3-phase, 50 cycles, 3,460 volt/220 volt, 125 kVA, oil cooled. In perfect order.—Apply Britannia Batteries, Ltd., Redditch. 563

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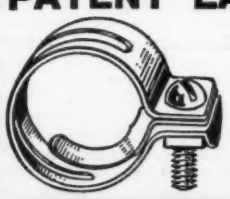

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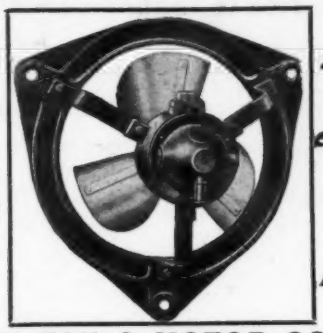

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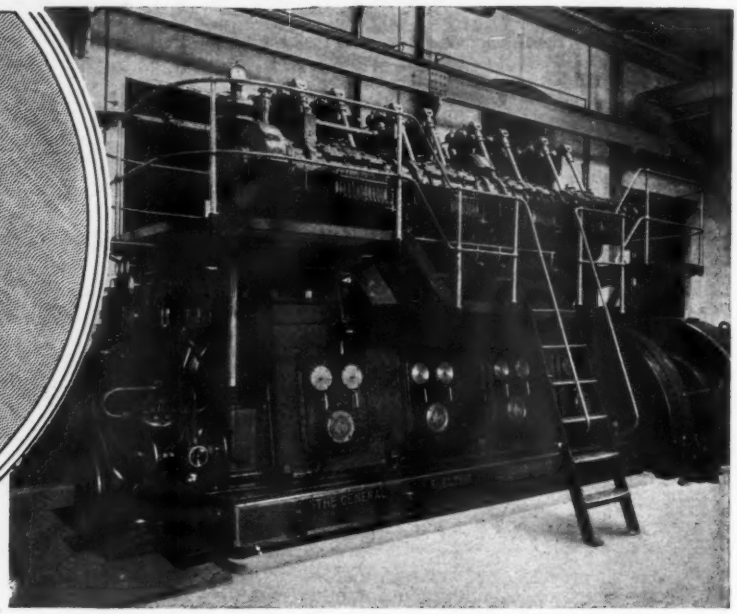

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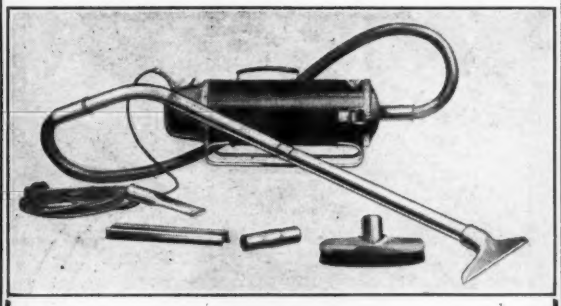

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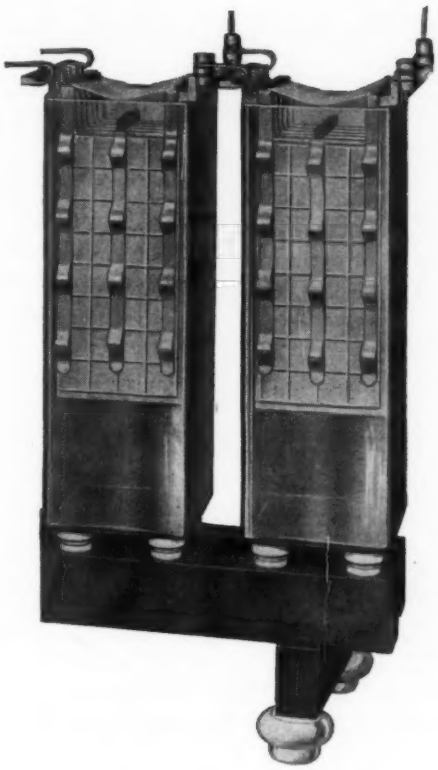

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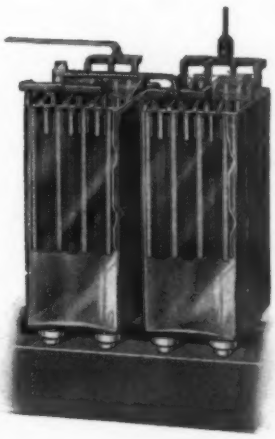

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AUCKLAND, N.Z.: Gordon & Gotch. Albert Street: R. Hill & Son. Matlock House, 33/34, Quay Street; Trade Publications Co., 302, N.Z. Insurance Buildings, Queen Street. H. A. Goddard, Ltd.

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BLOEMFONTEIN: Central News Agency, Ltd.

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BOSTON, MASS., U.S.A. F. W. Faxon Co., 83, Francis Street, Back Bay; Herman Goldberger, 110, High Street; W. H. Guild and Co., 120, Tremont Street.

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LAUNCESTON: Gordon & Gotch, Cimitiere Street; H. A. Goddard, Ltd.

LEIPZIG: Einkaufsstelle des Borsenvereins der Deutschen Buchhandler, Konigstrasse 35.

MADRAS: Higginbothams, Ltd.

MADRID: Editorial "Voluntad" S.A. Serrano 48.

MELBOURNE: Tait Book Co., 36, Queen Street; Gordon & Gotch, Queen Street; "Australasian Electrical Times," 312, Flinders Street; Commonwealth Magazine Agency, 294, Little Collins Street: G. Jervis Manton, 420, Little Collins Street; H. A. Goddard, Ltd.

MILAN: Libraria Paravia-Treves.

NANCY: Librarie Berger Levrault, 18, Rue des Glacis.

NAPLES: Libreria Paravia-Treves, Via Guglielmo Sanfelice 49-55.

NEW YORK: D. Van Nostrand, 8, Warren Street, Crowley, The Magazine Man, Inc., 511, E.164th. Street.

PARIS: Ricour, Chevillet et Cie, 22, Rue de la Banque; E. Le Francois, 91, Boulevard St. Germain; H. Le Soudier, 174/176, Boulevard St. Germain.

PERTH, W.A.: Gordon & Gotch William Street.

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ROME: Ditta P. Maglioni & C. Strini, 88, Via Due Macelli.

SANTIAGO (Chile): Alex. R. Walker, Casilla 286, Ahumada 357.

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TOKYO: Maruzen Co., Ltd., 11-16 Nihonbashi-Tori-Sanchome.

TORONTO, ONT.: Wm. Dawson and Sons, Ltd., Manning Chambers; Gordon & Gotch, 132 Bay Street.

WELLINGTON, N.Z.: Gordon & Gotch, Cuba Street.

ZURICH: E. Rascher & Cie, Rathausquai 20.

OFFICIAL NOTICES.

Latest time for receiving, 5 p.m. Tuesday.

PLYMOUTH CORPORATION.

THE Plymouth Corporation is prepared to receive Tenders for the supply and erection of:—

Two Water-Tube Boilers with Chimney, &c.

Copies of specification, &c., may be obtained from the City Electrical Engineer, Electricity Offices, Armada Street, Plymouth.

Sealed endorsed tenders to be delivered to the undersigned not later than July 10th, 1930.

The Corporation does not bind itself to accept the lowest or any offer.

(Signed) R. J. FITTALL,
Town Clerk.

Plymouth.
June 16th, 1930. 482

THE HESTON & ISLEWORTH URBAN DISTRICT COUNCIL.

Electricity Department.

THE Council invite Tenders for the supply, delivery and erection at the Electricity Works, Bridge Road, Hounslow, of:—

(a) One 3,000-kVA Transformer.

(b) Extra High Tension Switchgear and Interconnecting Cables.

Copy of general conditions, specification and form of tender may be obtained on application to the Engineer and Manager, Electricity Offices, No. 11, Staines Road, Hounslow.

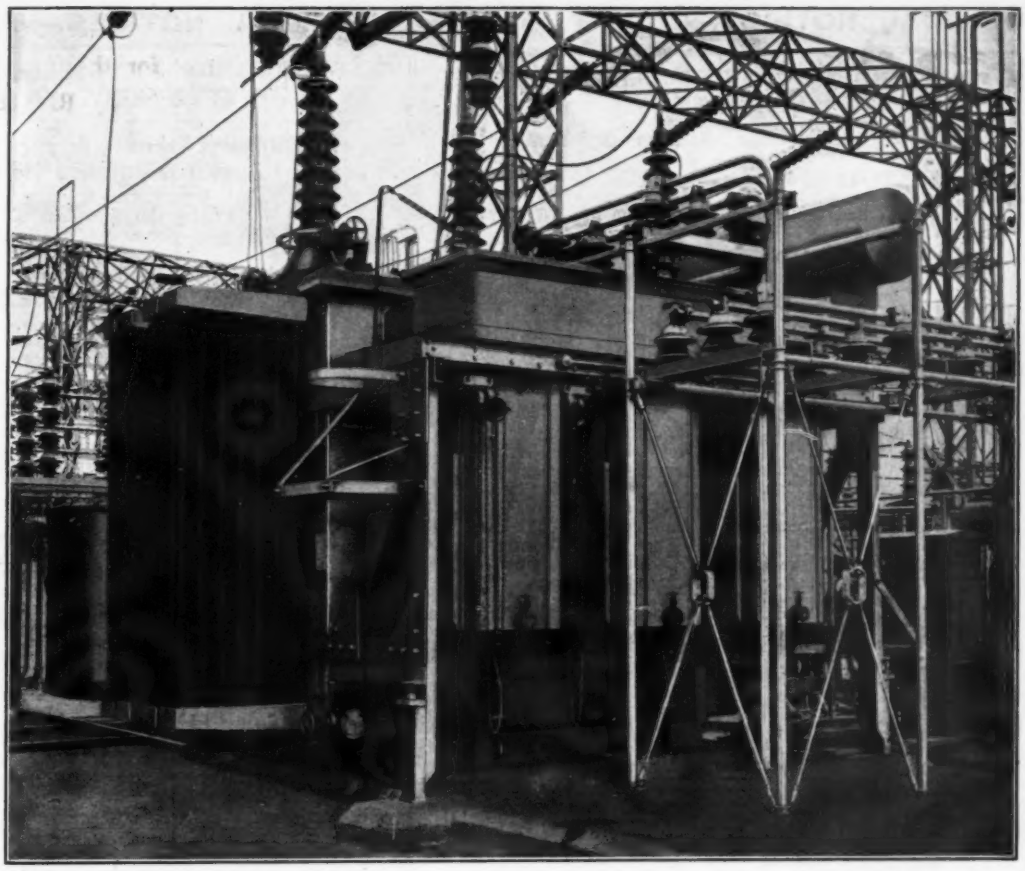
Tenders must be enclosed in sealed covers and endorsed "Tenders for Transformers" or "Tenders for Switchgear," as the case may be, and delivered to the undersigned not later than 12 noon on Friday, July 4th, 1930.

The Council do not bind themselves to accept the lowest or any tender.

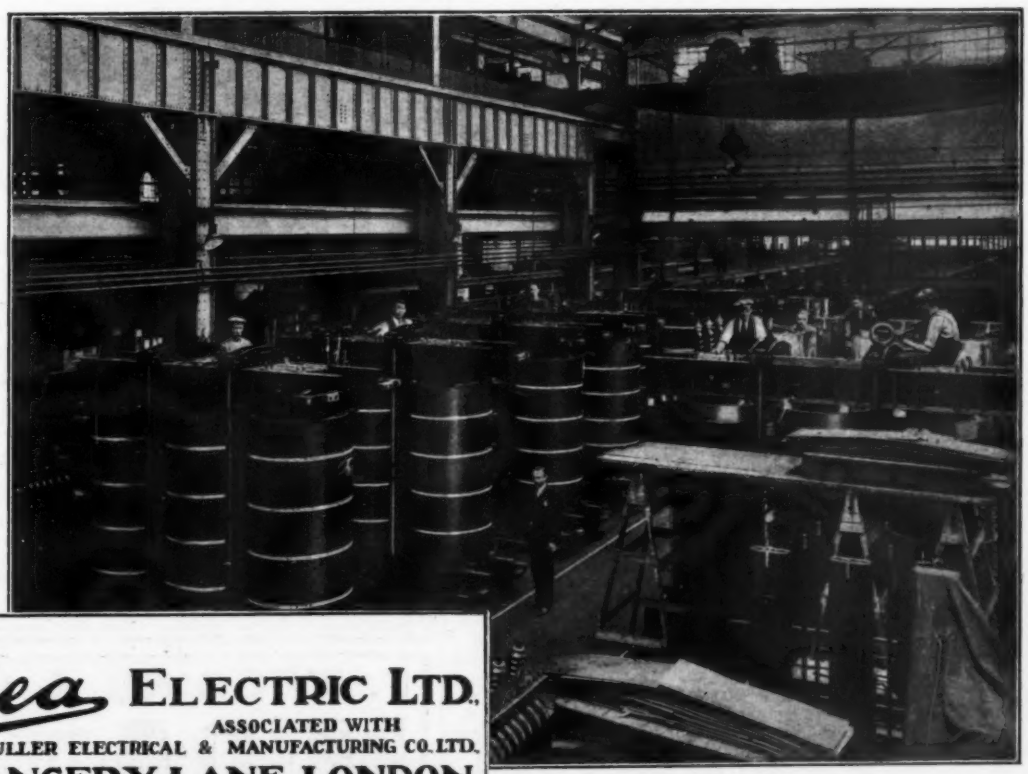
H. J. BAKER,
Clerk to the Council.

Council House, Hounslow. 510

(*Continued on Sup. 30*).



In commission—One of the 15,000 kVA, three-phase transformers, 132,000/6600 volts, manufactured at the Walthamstow Works, to the order of the Central Electricity Board. (Consulting Engineers—Messrs. Merz & McLellan.) **The transformer is complete with electrically operated on-load Voltage Ratio Regulator.**



View of large bay showing the transformers under construction at the WALTHAMSTOW WORKS.

Asea ELECTRIC LTD.
ASSOCIATED WITH
FULLER ELECTRICAL & MANUFACTURING CO. LTD.
5, CHANCERY LANE, LONDON.
—WORKS: WALTHAMSTOW, E.17.—
MANUFACTURERS OF ELECTRICAL PLANT OF EVERY DESCRIPTION.
TRADE MARK

OFFICIAL NOTICES.—(*Cont. from Sup. 28.*)

WEST MIDLANDS JOINT ELECTRICITY AUTHORITY.

Shropshire Distribution Scheme—Sub-station Transformers.

TENDERS are invited by the above-named Authority for the supply, delivery and erection of the following static step-down transforming plant :—

Two 1,000-kVA, 33,000/11,000-volt, three-phase, 50 cycle, outdoor type Transformers, complete with off-load tap-changing switches.

Four 25-kVA, 11,000/440/250-volt, three-phase, 50 cycle, outdoor type Transformers, complete with off-load tap-changing switches.

One 10-kVA, 11,000/440/250-volt, three-phase, 50 cycle, outdoor type Transformer, complete with off-load tap-changing switches.

Copies of specification (No. S/T-1) and form of tender may be obtained from Mr. E. F. Hetherington, M.I.E.E., M.I.Mech.E., Chief Engineer and Manager, at the offices of the Authority, on payment of a deposit of one guinea, which will, after the Authority have come to a decision on the tenders received, be returned to the tenderer, provided he shall have sent in a bona fide tender and shall not have withdrawn it.

Additional copies of the specification may be obtained on payment of half a guinea per copy, which will not be returned.

Tenders must be forwarded under sealed cover endorsed "Tender for Sub-Station Transformers, Contract No. S/T-1," so as to reach the undersigned not later than noon on Monday, July 14th, 1930.

The Authority do not bind themselves to accept the lowest or any tender.

H. F. CARPENTER,
Clerk and Treasurer.

Offices of the Authority :
Phœnix Buildings,
Dudley Road, Wolverhampton.
June 23rd, 1930. 541

WEST MIDLANDS JOINT ELECTRICITY AUTHORITY.

Shropshire Distribution Scheme—Sub-Station Switchgear.

TENDERS are invited by the above-named Authority for the supply, delivery and erection of either or both of the following sections of work :—

I. 33,000-volt Transmission Switchgear.
II. 11,000-volt Distribution Switchgear.

Copies of specification (No. S/S-1) and form of tender may be obtained from Mr. E. F. Hetherington, M.I.E.E., M.I.Mech.E., Chief Engineer and Manager, at the offices of the Authority, on payment of a deposit of one guinea, which will, after the Authority have come to a decision on the tenders received, be returned to the tenderer, provided he shall have sent in a bona fide tender and shall not have withdrawn it.

Additional copies of the specification may be obtained on payment of half-a-guinea per copy, which will not be returned.

Tenders must be forwarded under sealed cover endorsed "Tender for Sub-Station Switchgear, Contract No. S/S-1," so as to reach the undersigned not later than noon on Monday, July 14th, 1930.

The Authority do not bind themselves to accept the lowest or any tender.

H. F. CARPENTER,
Clerk and Treasurer.

Offices of the Authority :
Phœnix Buildings,
Dudley Road, Wolverhampton.
June 23rd, 1930. 540

CENTRAL ELECTRICITY BOARD.

South-East England Electricity Scheme, 1927.

THE Central Electricity Board invite tenders for the construction of foundation works for special towers carrying 132-kV transmission lines over the River Thames near Dagenham and Cross Ness.

Copies of the specification No. S.E.E.—P.F.6 and form of tender may be obtained from the offices of the Board on application to the undersigned on or after Monday, June 30th, 1930, on payment of a deposit of two guineas for the first copy and one guinea for each subsequent copy.

Sums paid for any number of copies up to three will be refunded on receipt of a bona-fide tender.

Tenders on the form supplied endorsed "Tender for Specification No. S.E.E.—P.F.6," must be delivered to the offices of the Board not later than 12 o'clock noon on Monday, July 28th, 1930. The Board do not bind themselves to accept the lowest or any tender.

RICHARD H. FOX,
Secretary and Solicitor.

Trafalgar Buildings,
1, Charing Cross, London, W.C.2. 533

OFFICIAL NOTICES.—*continued.*

WEST MIDLANDS JOINT ELECTRICITY AUTHORITY.

Shropshire Distribution Scheme—Secondary Transmission and Low-Tension Distribution (First Stage).

TENDERS are invited by the above-named Authority for the execution of any one or more of the following sections of work :—

A.—Supply and delivery, and/or installation, of 400/230-volt disconnecting boxes, cable and service components.

B.—Supply and delivery, and/or installation, of 400/230-volt consumers' house services.

C.—Supply, delivery and laying of 400/230-volt three-phase underground cable.

D.—Supply, delivery, erection and laying of 11,000-volt overhead and underground mains.

Copies of specification (No. 11,000-440/D/1), form of tender and drawings, may be obtained from Mr. E. F. Hetherington, M.I.E.E., M.I.Mech.E., Chief Engineer and Manager, at the offices of the authority, on payment of a deposit of one guinea, which will, after the authority have come to a decision upon the tenders received, be returned to the tenderer, provided he shall have sent in a bona-fide tender and shall not have withdrawn it. Additional copies of the specification may be obtained on payment of half-a-guinea per copy, which will not be returned.

Tenders must be forwarded under sealed cover endorsed "Tender for Contract No. 11,000-440/D/1," so as to reach the undersigned not later than noon on Monday, the 14th day of July, 1930.

The Authority do not bind themselves to accept the lowest or any tender.

H. F. CARPENTER,
Clerk and Treasurer.

Offices of the Authority :
Phœnix Buildings,
Dudley Road, Wolverhampton.
June 23rd, 1930. 539

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY COMPANY.

THE Directors are prepared to receive up to noon on Wednesday, July 16th, Tenders for the Supply of SIGNALLING CABLES.

Tenders must be made on forms, copies of which, with specification, can be obtained at these offices on payment of £1 each (which will not be returned).

The Directors do not bind themselves to accept the lowest or any tender.

S. G. S. YOUNG,
Secretary.

Offices : The White Mansion,
91, Petty France, Westminster, S.W.1.
June 23rd, 1930. 554

SLATE & MARBLE PANELS
ASHFORD, DUNN & CO., LTD.,
RYDE AVENUE, HULL.
Teleg. : "Mantel, Hull." Telep. : 7577 Central.
Manufacturers of every description of Slate and Marble Work for Electrical Purposes.

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Telegraph & India-Rubber Works, Ld.
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MILLWALL DOCKS, LONDON, E.14.
PURE TAPE AND STRIP, &c., &c.
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THE GALVANIZED WIRE THAT WILL WRAP ON ITSELF WITHOUT FLAKING OR PEELING AND CONFORM TO B.E.S.A. SPEC'N.

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Galvanized Iron and Steel Wires for Conductors and Earths,

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STRIPS, BARS AND WIRES (FERROUS AND NON-FERROUS)

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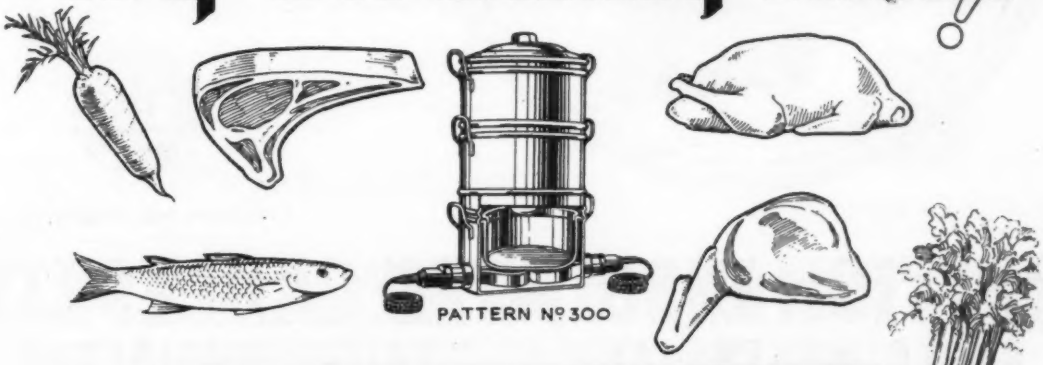
Try Steaming Them!



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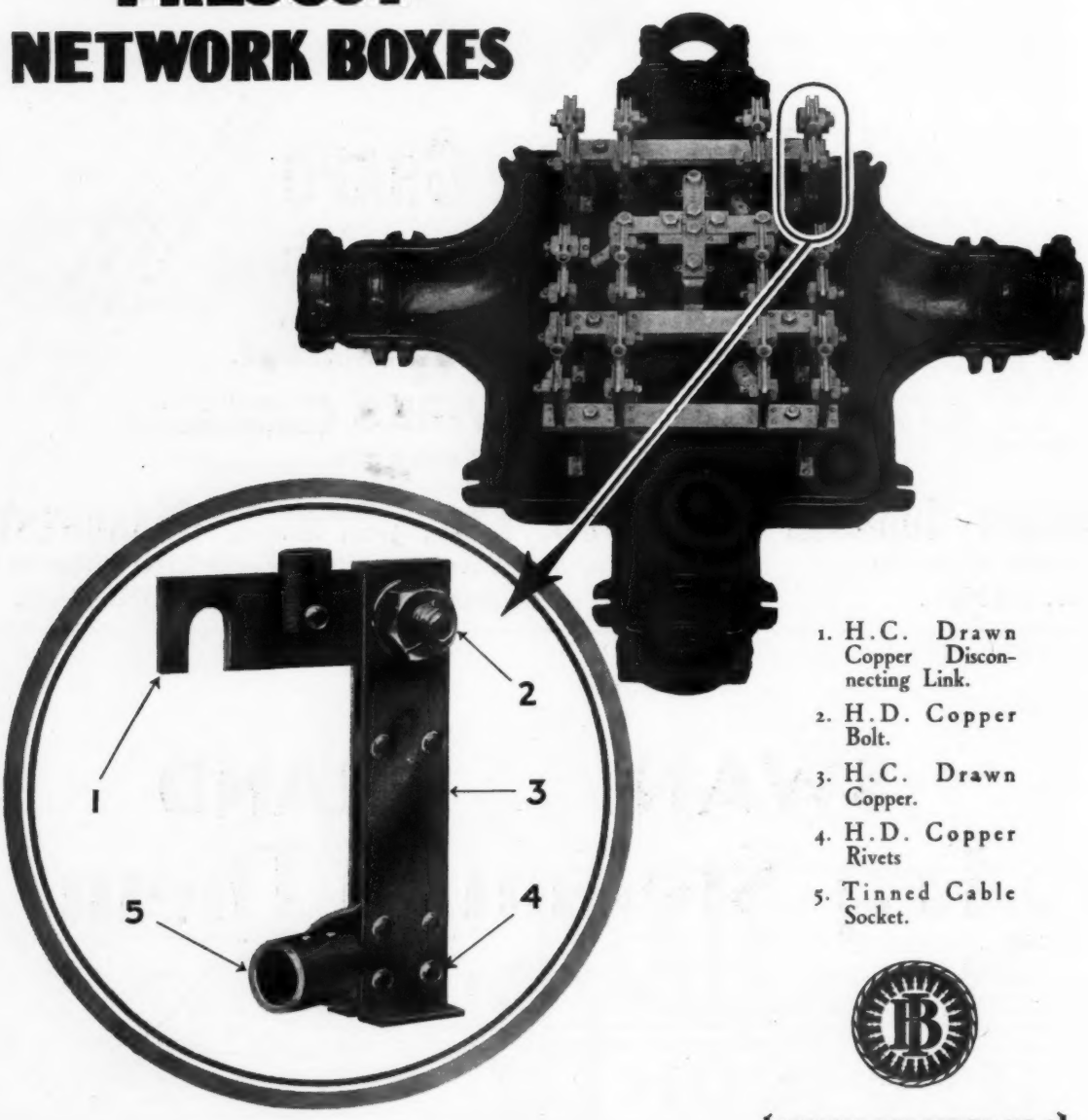

1. H.C. Drawn Copper Disconnecting Link.
2. H.D. Copper Bolt.
3. H.C. Drawn Copper.
4. H.D. Copper Rivets
5. Tinned Cable Socket.

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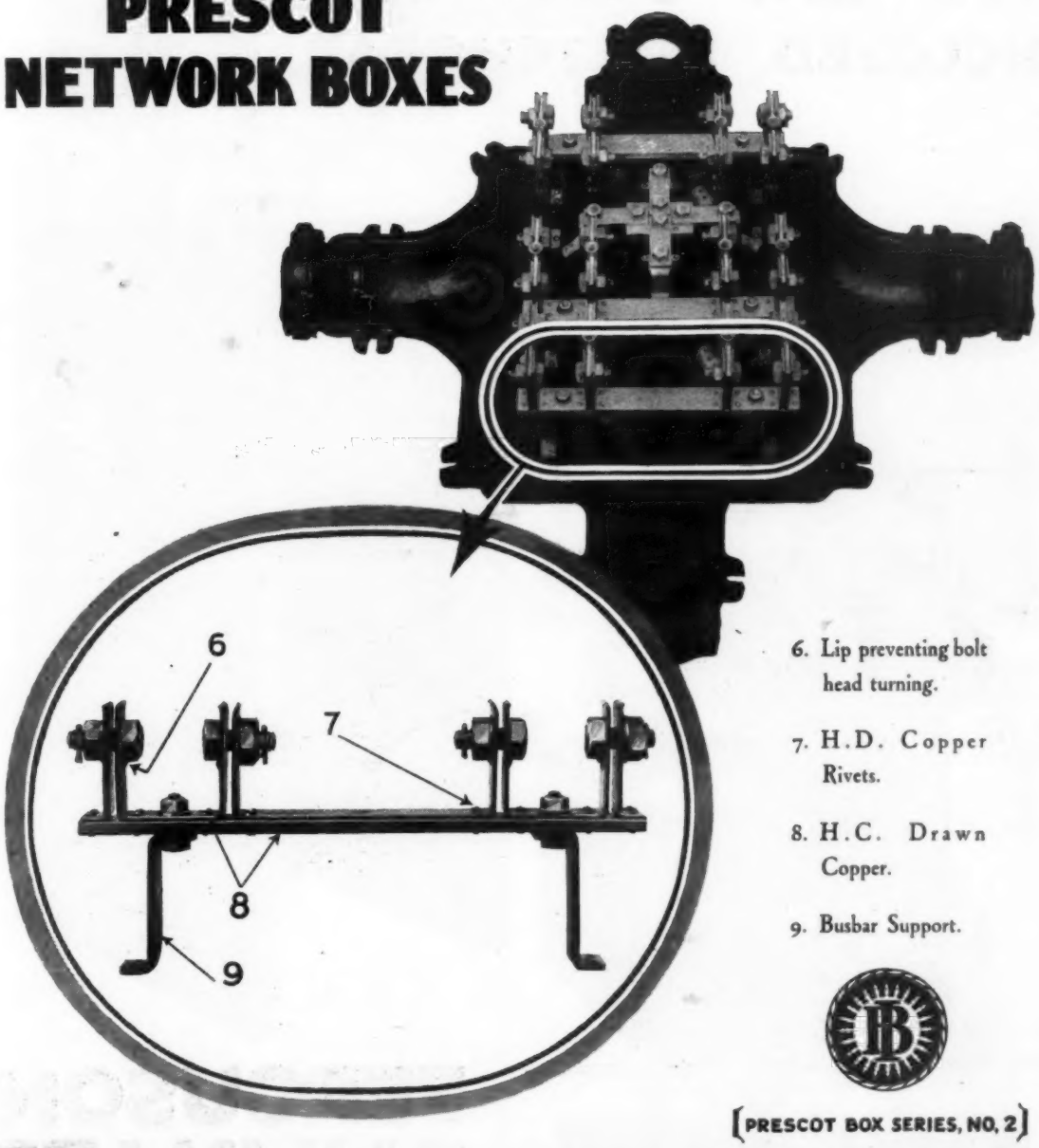
POINTS ABOUT PRESCOT NETWORK BOXES



6. Lip preventing bolt head turning.
7. H.D. Copper Rivets.
8. H.C. Drawn Copper.
9. Busbar Support.

[PRESCOT BOX SERIES, NO. 2]

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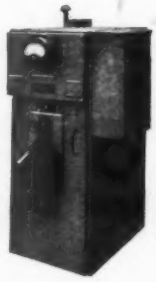
PRESCOT, LANCS.

Telephone No. PRESCOT 171.

London Office. SURREY HOUSE, EMBANKMENT, W.C.2. Telephone No. TEMPLE BAR, 4793, 4, 5, & 6.

TYPE "B.V." DRAWOUT ENCLOSED SWITCHGEAR



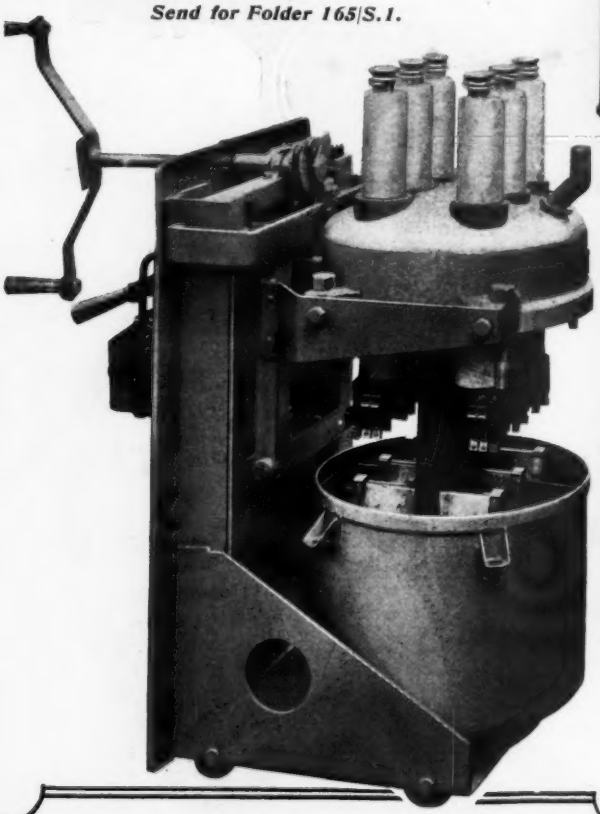
"B.V." Units with Busbar Cable Box.

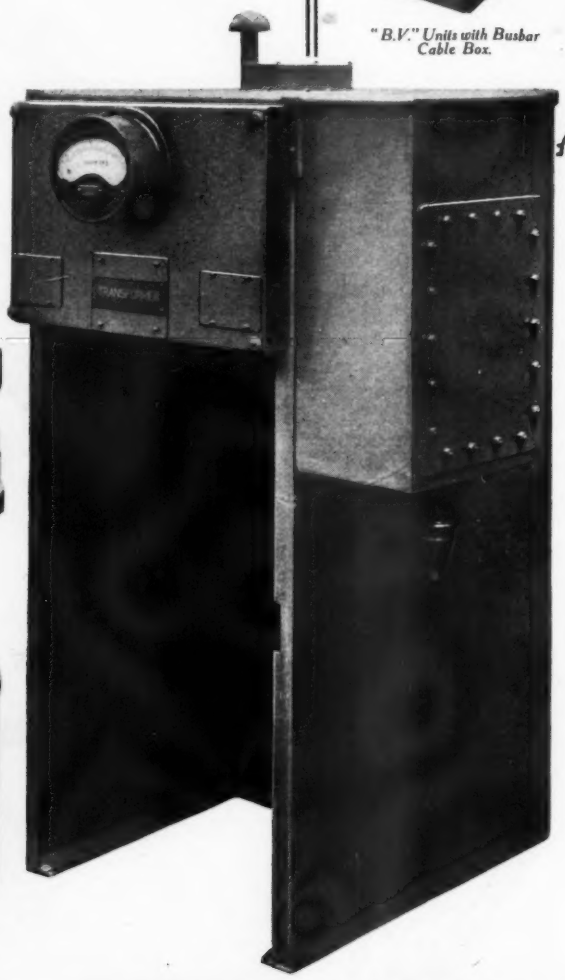
THIS unit represents a marked advance on present-day switching practice for service on single busbar systems of moderate rupturing capacity up to 11,000 volts with a maximum line current of 8.00 amps.

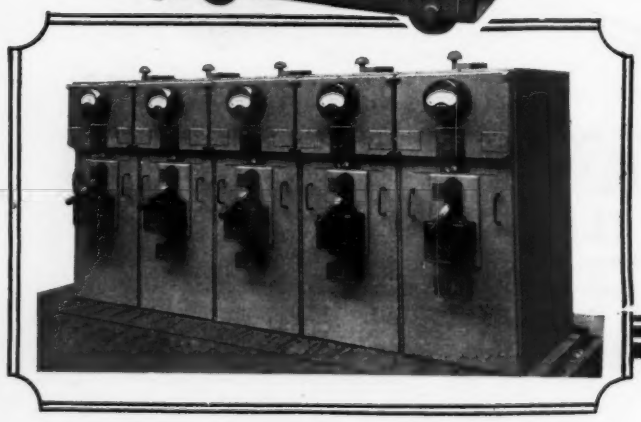
The unit is a combination of the drawout truck and vertical metalclad principle of isolation, possessing the advantages of both, with the added advantage of taking up less space than either type of gear.

This switch has been subjected to a considerable number of short circuit tests, and the design has been perfected on the data obtained from these tests.

Send for Folder 165/S.1.







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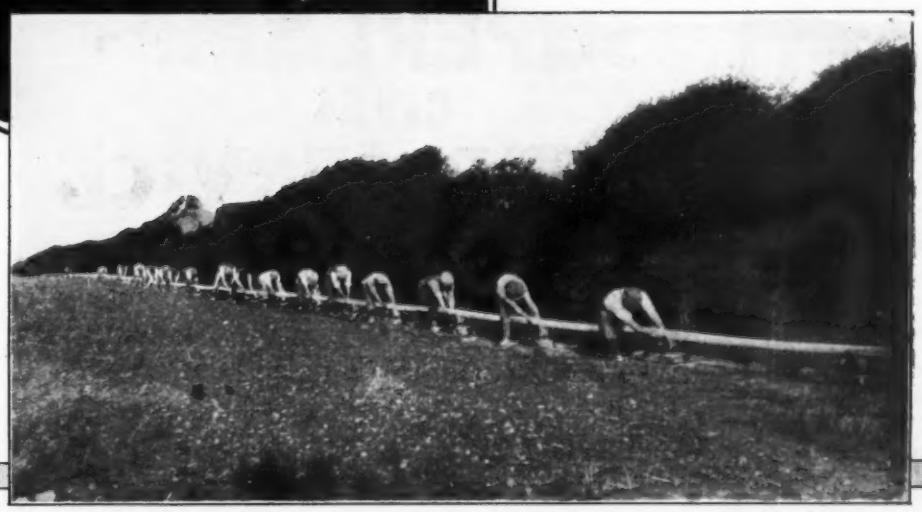
LONDON: Bush House, Aldwych, W.C 2. *Telephone:* Temple Bar 9347.

AUSTRALIA: Marrickville, Sydney, New South Wales.

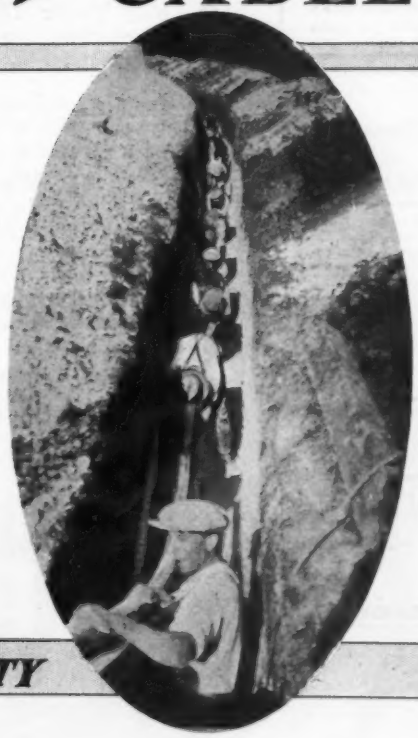
SOUTH AFRICAN AGENTS: Dowson & Dobson, P.O. Box 6468. Corner of Simmonds Street and Anderson Street, Johannesburg.

F.P 218

EFFICIENT INSTALLATION METHODS FOR THE BEST CABLES MEAN — SATISFACTION FOR YOU



Standard 33,000 VOLT CABLES



The two illustrations show work proceeding on one of our 33,000-volt cable contracts.

OUR EXPERIENCE IS AT YOUR DISPOSAL

We shall be pleased for one of our Engineers to call upon you at your convenience.

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Columbia House, Aldwych, London, W.C.2.
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A GOOD CONNECTOR KEEPS DOWN MAINTENANCE COSTS, JUST AS AN INFERIOR CONNECTOR INCREASES THEM.

DUE LARGELY TO THE CARE GIVEN TO THE CONNECTOR DESIGN, PREMIER IRONS ARE KNOWN AS THE IRONS WHICH COST NOTHING TO MAINTAIN.

Here are three of their outstanding features:—

THE CORD GRIP—firmly holds outside section of "flex"—not conductors only—thus preventing "flex" breakage at most vulnerable point. Also avoids danger of user pulling cable away from socket.

PATENT SPRING-TONGUED SOCKETS—of finest quality phosphor-bronze; give clean, firm contact with solid (not split) terminals; permanently resilient.

FLEXIBLE CABLE—designed specially for Premier "Smoothwell" Irons; extreme mechanical strength; heavy conductors with good reserve carrying capacity; unusually thick insulation; will not kink or break.

This Connector is also supplied in a slightly modified form, making a safe and efficient earthing device.

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with moving flame & smoke effect
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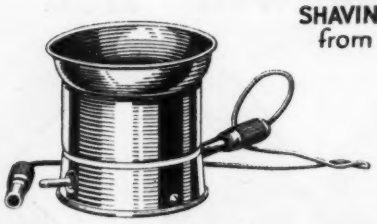

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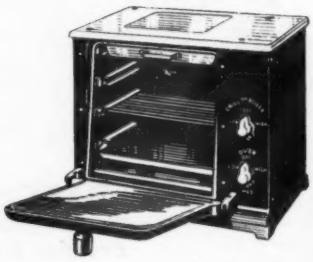
Compact and efficient
Price £4-19-6



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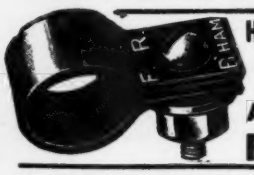
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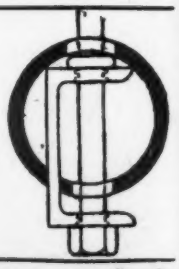
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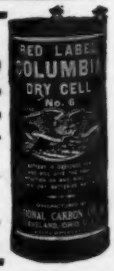

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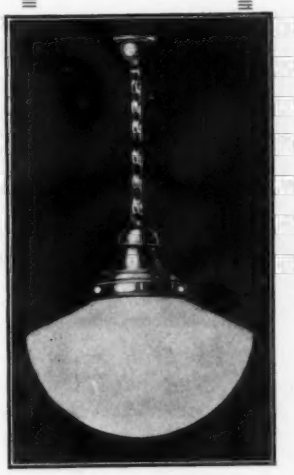

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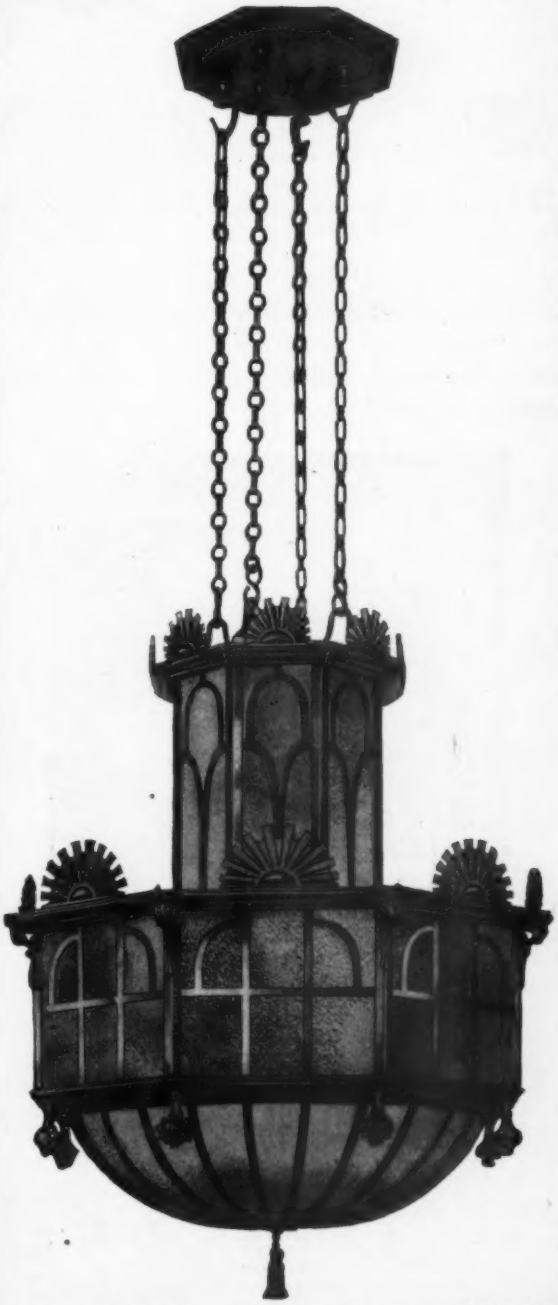

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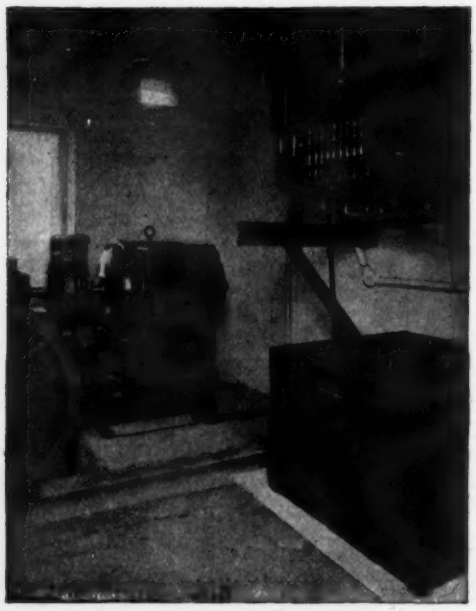

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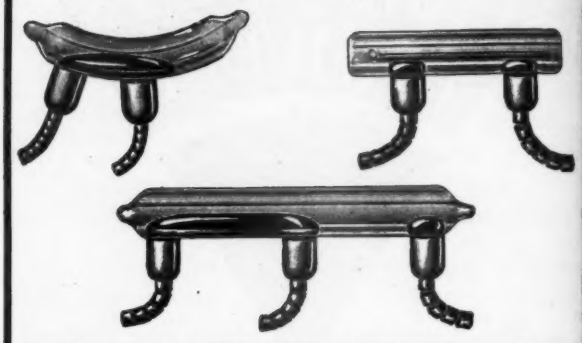

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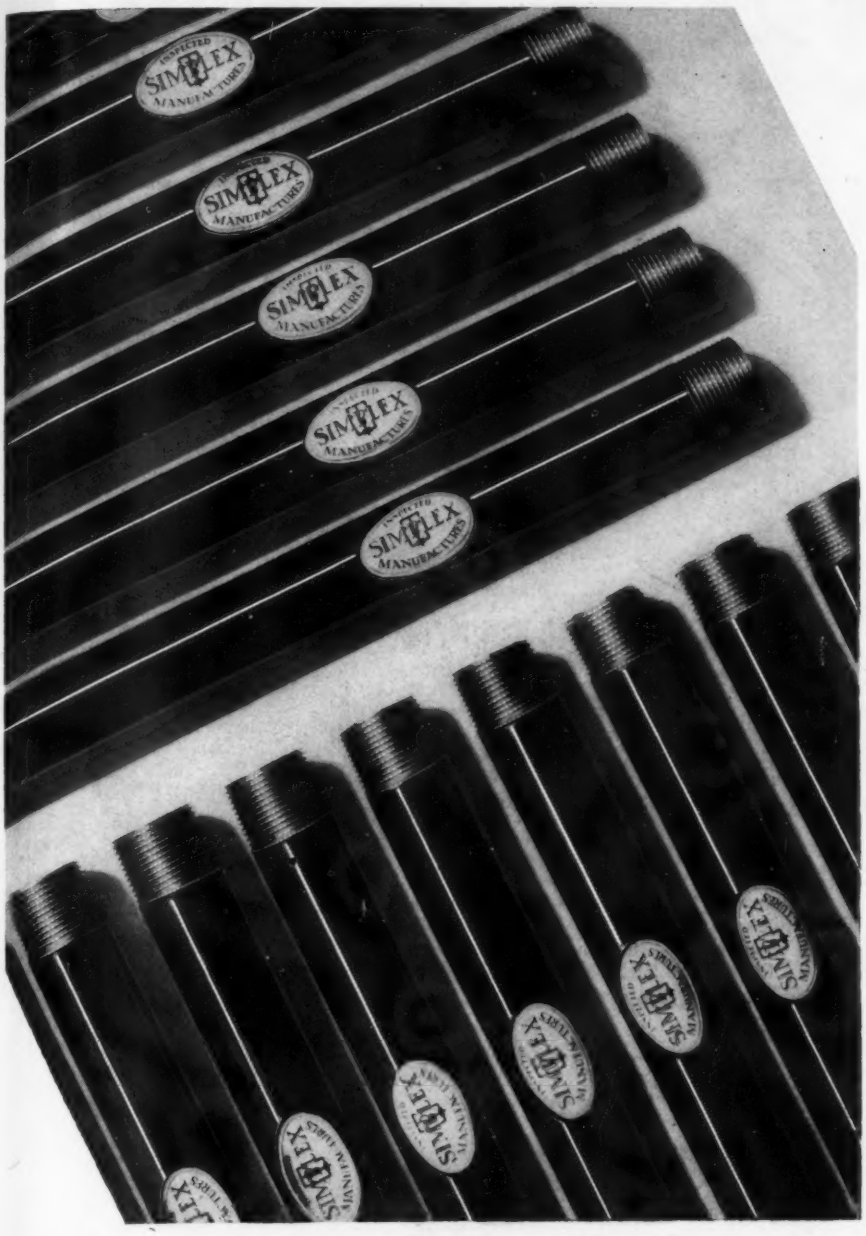

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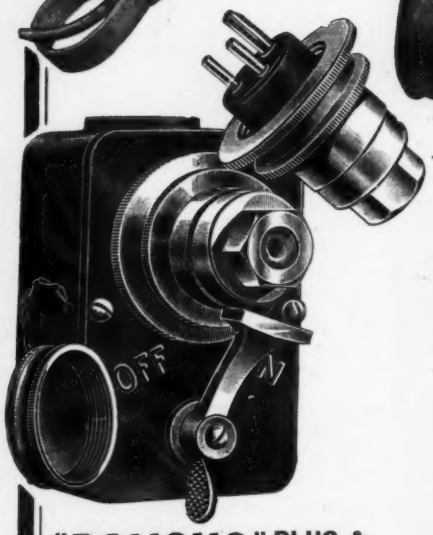

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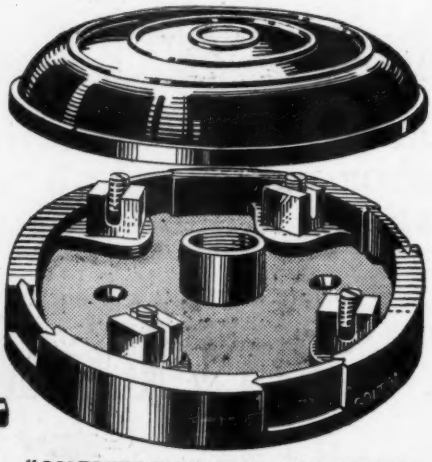

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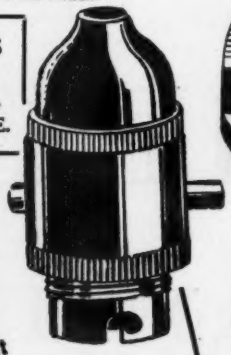

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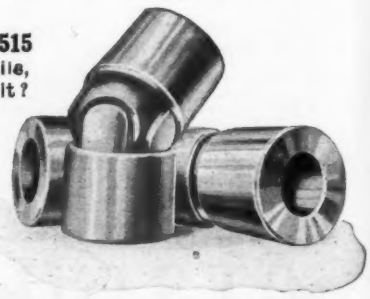

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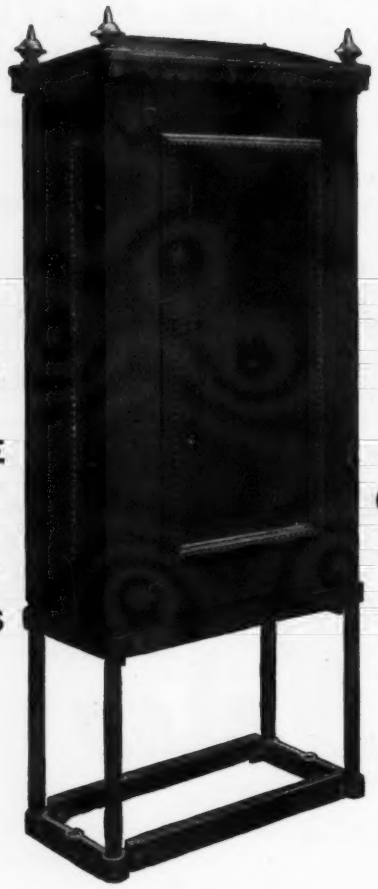

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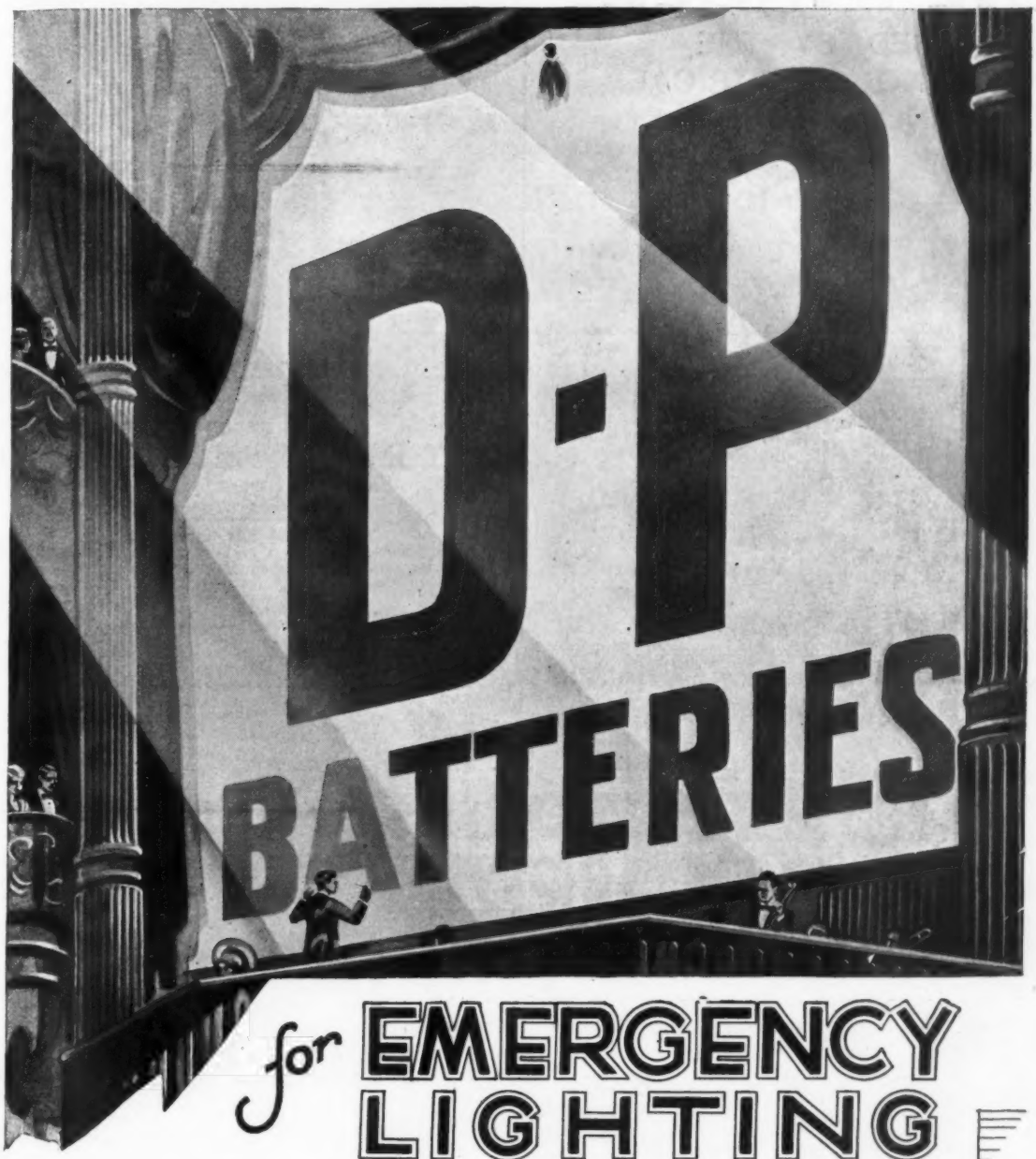

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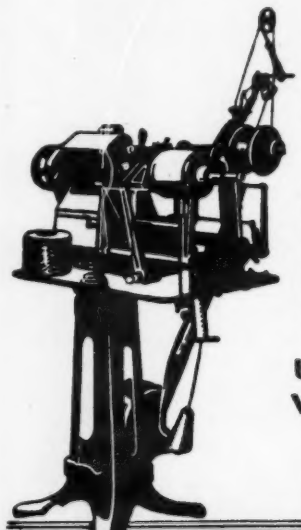

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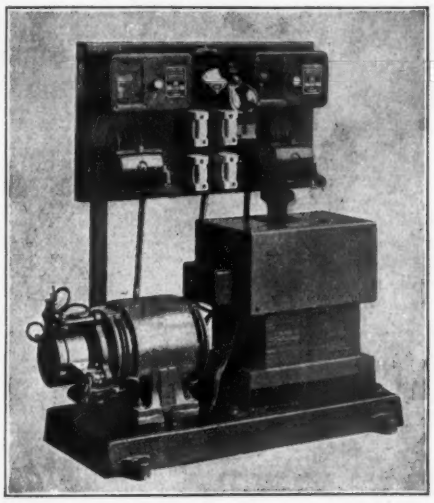

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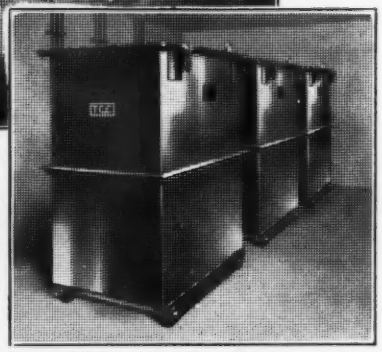

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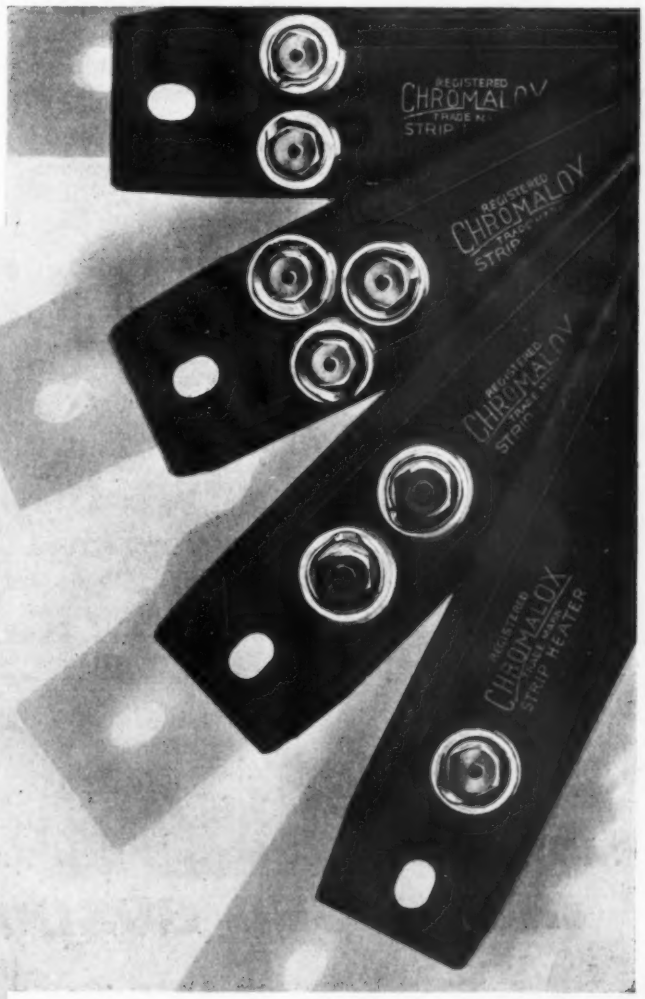

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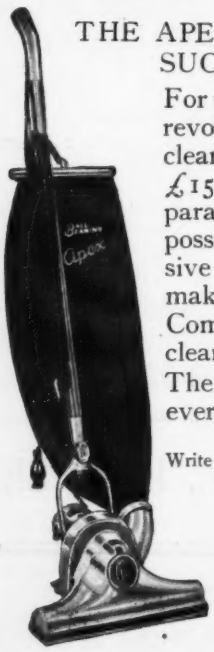

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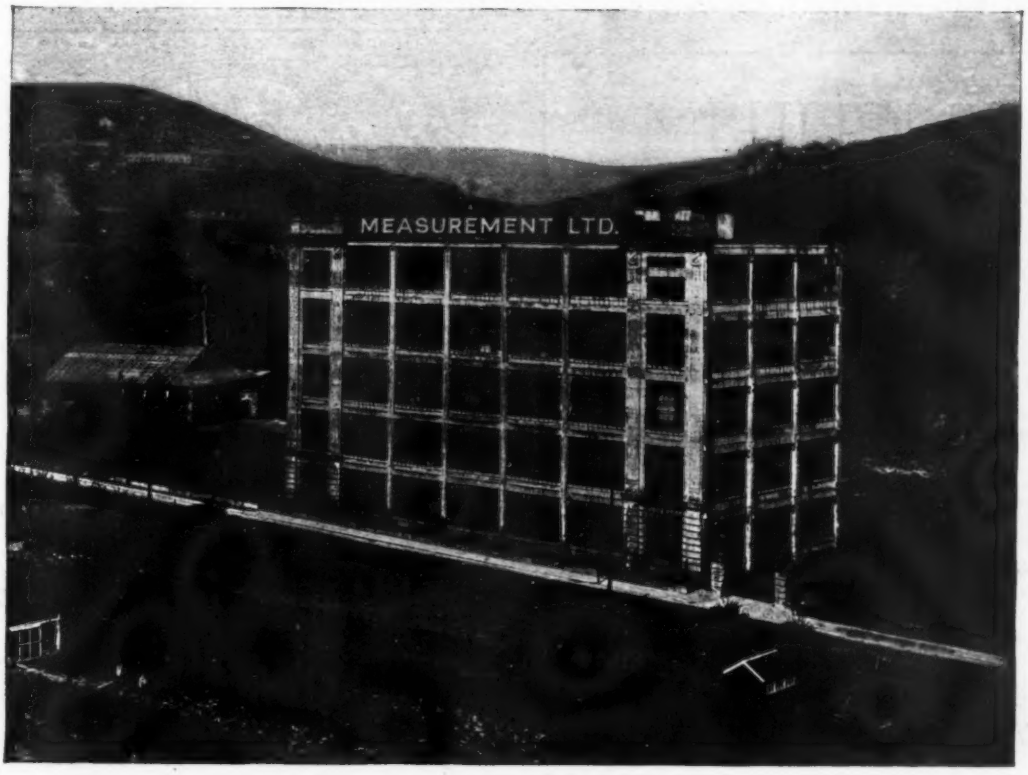

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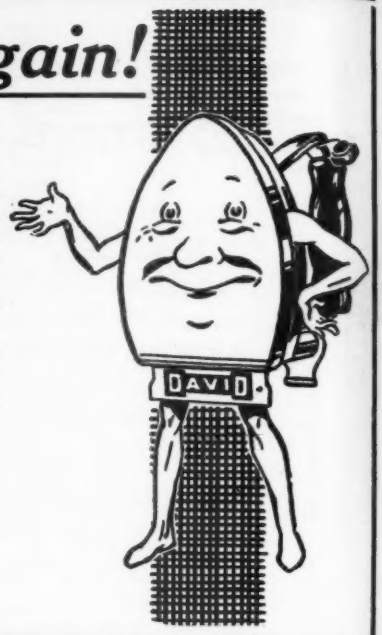

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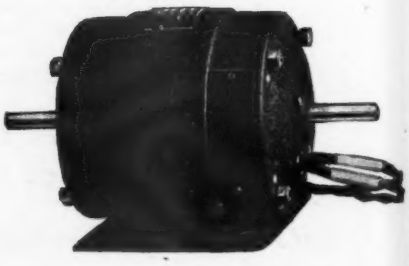

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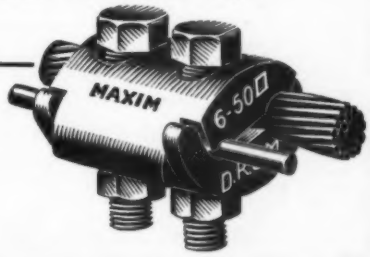

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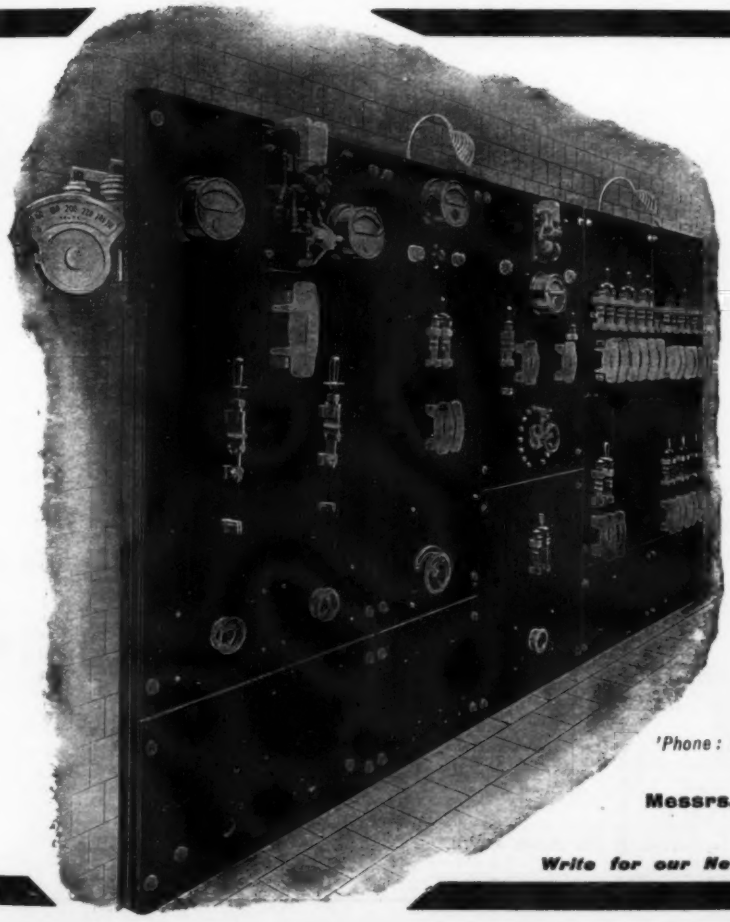

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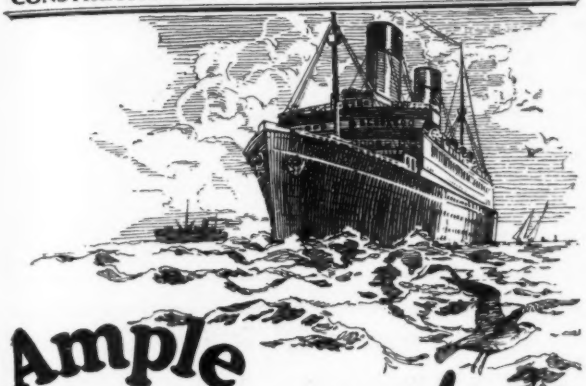

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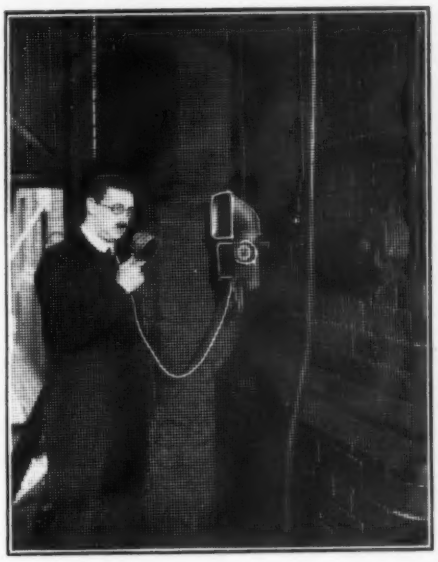

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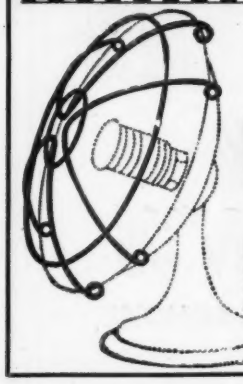

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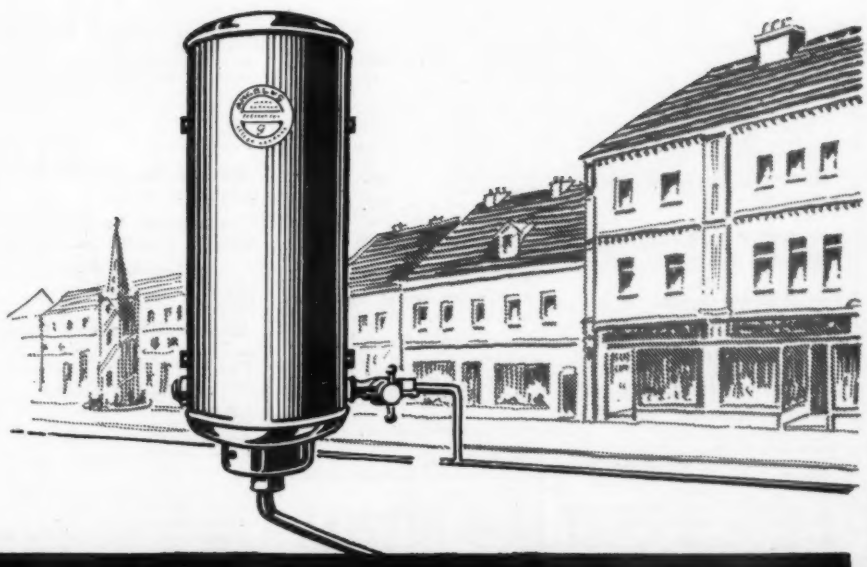

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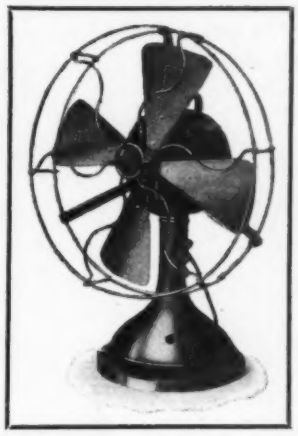

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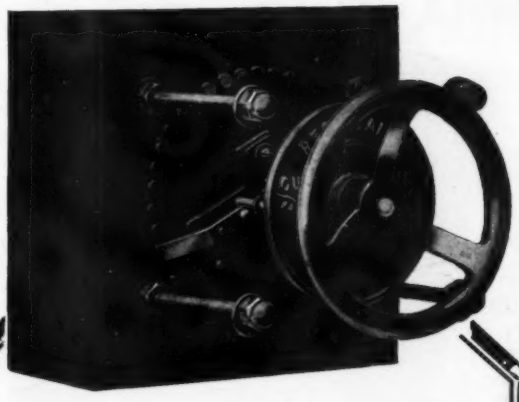

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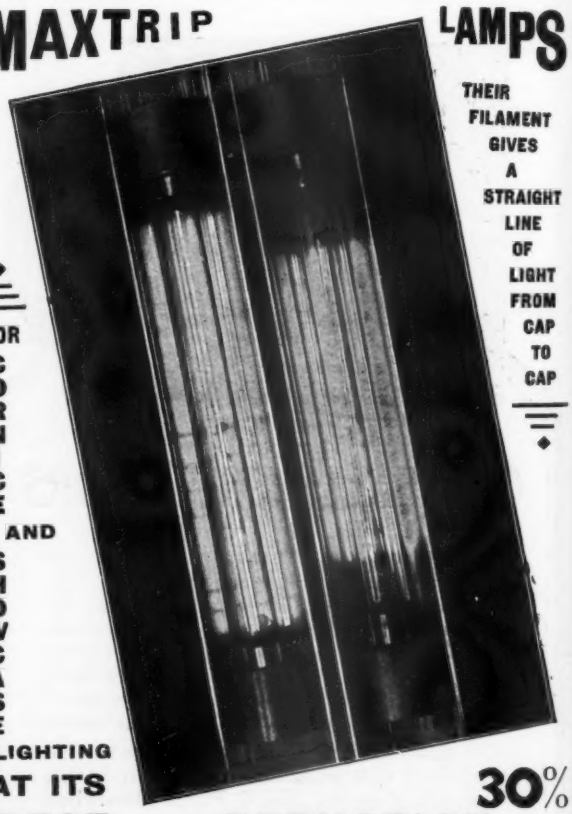

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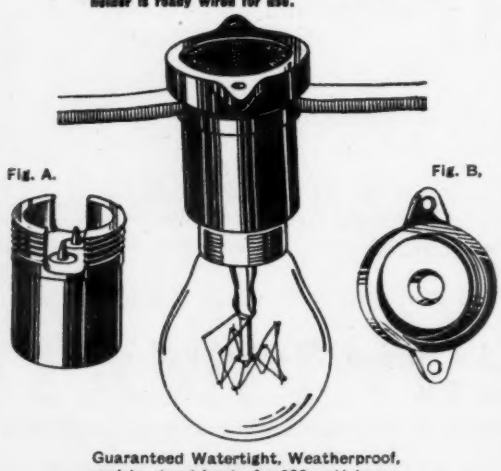

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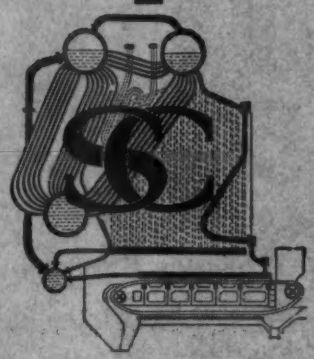

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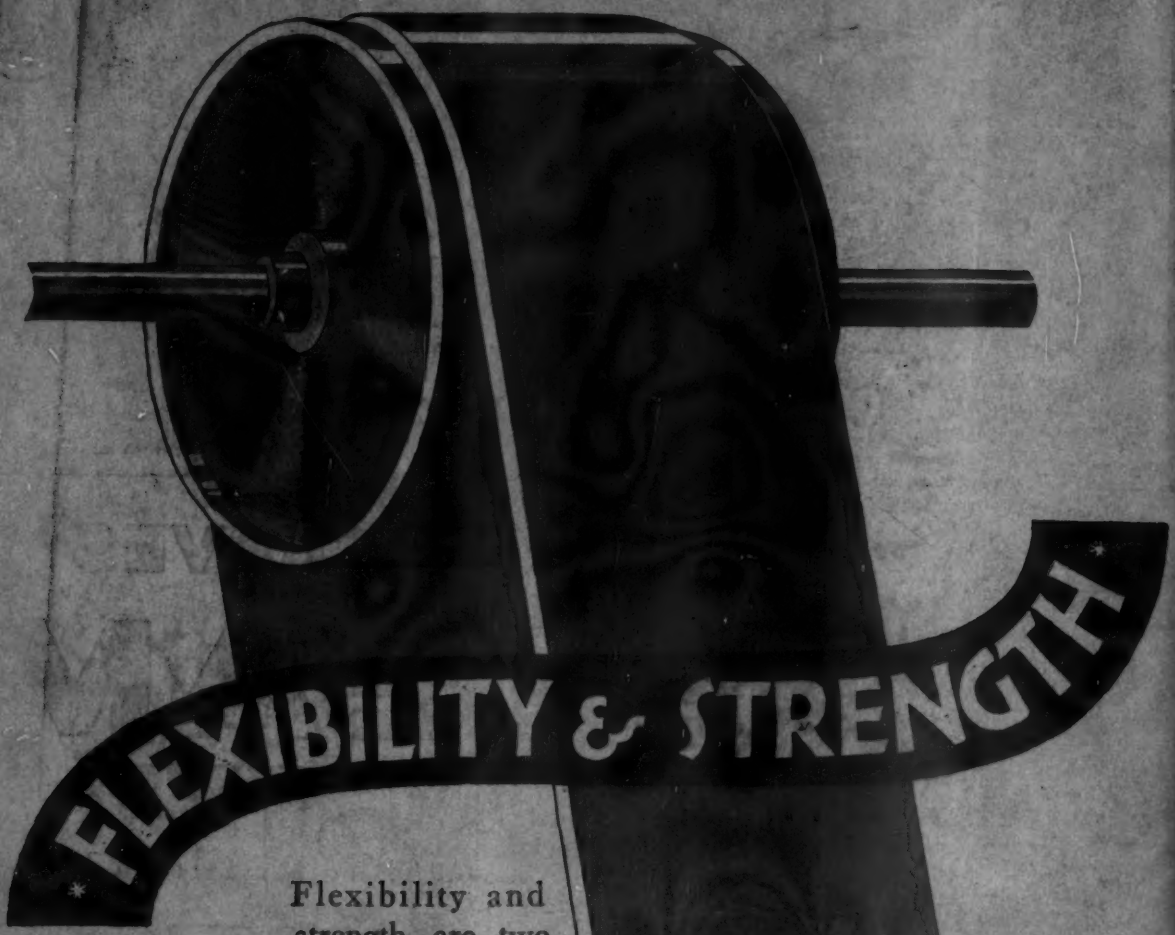

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